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OFFICE OF TECHNICAL SERVICES

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OF SCIENTIFIC AND INDUSTRIAL REPORTS

Vol. 8 — March 5, 1948 — No. 10

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* Indicates that reports in the BIOS, CIOS and FIAT series are deposited in the Library of Congress Depository Libraries. For a complete list of these libraries, see page facing page 1, volume 5, of this Bibliography.

In addition to the indexes described on the back cover of this Bibliography, the following reference works are available from the Office of Technical Services:

PB L 87782. HOLLOWAY, O. WILLARD. American and British atomic energy reports: A list of reports on atomic energy released by the Office of Technical Services. Feb 1946. 30 p. Price: 75¢

PB L 81500. HOLLOWAY, O. WILLARD and ISAAC, OLIVER B. Classified list of OTS printed reports: A list of reports on German and Japanese technology, prepared by American investigators, which are available in printed form from the Office of Technical Services. Oct 1947. 59 p. Price: 75¢

PB L 58101-R. SWIFT, GRACE. Government document series, analyzed by Office of Technical Services. Rev. Nov 1947. 45 p. Price: 25¢

PB L 79322. SWIFT, GRACE and ORNE, JEROLD. Subject headings for technical libraries. Jun 1947. 167 p. Price: $1.50

PB L 81803. U. S. OFFICE OF TECHNICAL SERVICES, TECHNICAL INDUSTRIAL INTELLIGENCE DIVISION. Reports resulting from the investigation of German technology, 1945-1946, and index of personnel. May 1947. 207 p. Price: $5.25

The stock supply of PB L 78000, "OSRD Reports: Bibliography and index of declassified reports having OSRD numbers," by W. Kenneth Lowry, is exhausted; it is now available at $2.00 microfilm and $7.00 photostat.

ERRATA:

v. 7, p. 1088 Entries for PB L 74699, Frames 4082-4400, are erroneously listed as "PB L 74669."

v. 8, p. 53 Entry for PB L 46647 should read "Frames 286-301" with a microfilm price of $2.00. (Frames 302-317 are duplicates of Frames 286-301.)

CHEMICALS AND ALLIED PRODUCTS

Drugs and Pharmaceuticals

PB L 80335. KERN, J. G. and others. Miscellaneous pharmaceuticals and pharmaceutical intermediates, manufactured at I.G. Farbenindustrie A.G., Elberfeld. (FIAT Final Rept 1014). Jun 1947. 80 p. Price: Mimeo-$2.00
Processes were obtained for eleven pharmaceuticals and as many more underlying intermediates. These processes are of interest not only for themselves but because of special procedures used and certain reactions carried out which have general value as novel methods of chemical synthesis, they are presented in full detail. Appendix 3 contains manufacturing processes for 26 pharmaceuticals and pharmaceutical intermediates (in German).

PB L 88044. MILLER, BENJAMIN F. Contract No. OEMcmr-136; M-1076. Committee on Medical Research Office of Scientific Research and Development, May 1, 1942 to Oct. 1, 1943. Final report. Oct 1943. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
A study of the effectiveness of cationic detergents, Zephiran and Phemerol, as degerming agents for hand hygiene and the anti-bacterial agents protamine sulfate and thymus histone as anionic detergents. Protamine may be indicated in certain eye infections such as shipyard conjunctivitis.

Dyes

PB L 70337. I.G. FARBENINDUSTRIE A.G. Reports on dyes. (FIAT Microfilm Reel C-8, Frames 8177-9461). 1934-1939. 1284 f. Price: Microfilm-$6.00 - Photostat-$128.50.
This FIAT microfilm reel contains 164 reports on research in the field of dyes. Individual reports, listed below, may be obtained as enlargement prints. Please include PB and frame numbers when ordering an individual item. These reports are in German.

Frames	Title	Price
8177 - 8239 PB L 70337	Triarylmethane dyes developed with chromo. By Müller. In German.	$6.50
8240-8241 PB L 70337	Rhodamine dyes. By Schepss. n. d. In German.	1.50
8242 - 8243 PB L 70337	Oxazine dyes. By Schepss. n.d. In German.	1.50
8244 - 8245 PB L 70337	Safranine dyes. By Schepss. n.d. In German.	1.50
8246 - 8247 PB L 70337	Substantive benzaldehyde dyes. By Berres. n.d. In German.	1.50
8248 - 8249 PB L 70337	Substantive benzaldehyde dyes. By Schepps. n.d. In German.	1.50
8250 - 8251 PB L 70337	Ketone dyes. By K. Schmidt. n.d. In German.	1.50
8252 - 8253 PB L 70337	Ketone dyes. By Schoemer. n.d. In German.	1.50
8254 - 8255 PB L 70337	Hydrol and formaldehyde dyes. By Schepps. n.d. In German.	1.50
8256 PB L 70337	Hydrol and formaldehyde dyes. By Berres. n.d. In German.	1.50
8257 - 8258 PB L 70337	Hydrol and formaldehyde dyes. By Schoemer. n.d. In German.	1.50
8259 - 8260 PB L 70337	Polymethine dyes. By Retter. n.d. In German.	1.50
8261 PB L 70337	Polymethine dyes. By Retter. n.d. In German.	1.50
8262 - 8265 PB L 70337	Polymethine dyes. By Retter. n.d. In German.	1.50
8266 PB L 70337	Polymethine dyes. By Schoemer. n.d. In German.	1.50
8267 - 8270 PB L 70337	Polymethine dyes. By K. Schmidt. n.d. In German.	1.50
8271 - 8273 PB L 70337	Polymethine dyes. By Blomer. n.d. In German.	1.50
8274 - 8278 PB L 70337	Phenylated and naphthylated rosaniline dyes. By Schoemer. n.d. In German.	1.50
8279 - 8280 PB L 70337	Rhodamines. By Netz. n.d. In German.	1.50
8281 - 8282 PB L 70337	Oxazine dyes. By Schepss. n.d. In German.	1.50
8283 - 8293 PB L 70337	Safranines. By Huber. n.d. In German.	1.50
8294 - 8309 PB L 70337	Safranines. By Vogt. n.d. In German.	2.00
8309a - 8312 PB L 70337	Safranines. By Vogt and Huber. n. d. In German.	1.50
8313 - 8316 PB L 70337	Safranines. By Blomer. n.d. In German.	1.50
8317 - PB L 70337	Safranines. By Schepss. n.d. In German.	1.50
8318 - 8320 PB L 70337	Substituted benzaldehyde dyes. By Berres. n.d. In German.	1.50
8321 - 8323 PB L 70337	Substituted benzaldehyde dyes. By Kern. n.d. In German.	1.50
8324 - 8333 PB L 70337	Substituted benzaldehyde dyes. By Müller. n.d. In German.	1.50
8334 - 8336 PB L 70337	Substituted benzaldehyde dyes. By Retter. n.d. In German.	1.50
8337 - 8339 PB L 70337	Substituted benzaldehyde dyes. By Retter. n.d. In German.	1.50
8340 PB L 70337	Substituted benzaldehyde dyes. By Retter. n.d. In German.	1.50
8341 - 8345 PB L 70337	Substituted benzaldehyde dyes. By K. Schmidt. n.d. In German.	1.50
8346 PB L 70337	Substituted benzaldehyde dyes. By Schoemer. n.d. In German.	1.50
8347 - 8348 PB L 70337	Substituted benzaldehyde dyes. By Teupel. n.d. In German.	1.50
8349 PB L 70337	Substituted benzaldehyde dyes. By Schepss. n.d. In German.	1.50
8350 - 8351 PB L 70337	Ketone dyes. By Retter. n.d. In German.	1.50
8352 - 8356 PB L 70337	Ketone dyes. By Schoemer. n.d. In German.	1.50
8357 - 8358 PB L 70337	Hydrol and formaldehyde dyes. By Kern. n.d. In German.	1.50
8359 - 8360 PB L 70337	Chromoxane dyes. By Berres. n.d. In German.	1.50
8361 - 8363 PB L 70337	Chromoxane dyes. By Kern. n.d. In German.	1.50

8363a- 8364 PB L 70337 Chromoxane dyes. By K. Schmidt. n.d. In German. 1.50

8365 PB L 70337 Chromoxane dyes. By Schepss. n.d. In German. 1.50

8366 - 8367 PB L 70337 Gallo-dyes. By Huber. n.d. In German. 1.50

8368 PB L 70337 Gallo-dyes. By Schepss. n.d. In German. 1.50

8369 - 8370 PB L 70337 Pigment dyes. By Kern. n.d. In German. 1.50

8371 - 8372 PB L 70337 "Viridines". By Berres. n.d. In German. 1.50

8373 - 8374 PB L 70337 Substituted chalcones. By Berres. n.d. In German. 1.50

8375 - 8377 PB L 70337 Schulemann-aldehyde dyes. By Müller. n.d. In German. 1.50

8378 - 8383 PB L 70337 Azo aldehyde dyes. By Müller. n.d. In German. 1.50

8384 - 8387 PB L 70337 Carboxylic acid triphenylmethane dyes By Müller. n.d. In German. 1.50

8388 - 8389 PB L 70337 Triphenylmethane dyes. By Müller. n.d. In German. 1.50

8390 - PB L 70337 Benzaldehyde dyes. By Blümer. n.d. In German. 1.50

8391 - 8397 PB L 70337 Phosphates of basic dyes. By Müller, and Retter. Apr 15, 1935. In German. 1.50

8398 - 8401 PB L 70337 Triphenylmethane dyes. By K. Schmidt. Apr 15, 1935. In German. 1.50

8402 - 8407 PB L 70337 Induline fusion. By Metz. n.d. In German. 1.50

8408 - 8415 PB L 70337 Anilinophenyl-aposafranine and derivatives. By Metz. Apr 15, 1935. In German. 1.50

8416 - 8421 PB L 70337 Dyes from hydrol and p-dimethylxylidine or butylhydroxy-ethylcresidine. By Müller. Apr 15, 1935. In German. 1.50

8422 - 8441 PB L 70337 Polymethine dyes of the astraphloxine type (carbocyanines). By K. Schmidt. Apr 15, 1935. In German. 2.00

8442- 8465 PB L 70337 Polymethine dyes. By Müller and Berres. Apr 15, 1935. In German. 2.50

8466 - 8474 PB L 70337 Production of asymmetrical triphenylmethane dyes from derivatives of the benzohydrol. By Schommer. Apr 15, 1935. In German. 1.50

8475 - 8488 PB L 70337 Production of asymmetrical triphenylmethane dyes from benzophenone derivatives. By Schommer. Apr 15, 1935. In German. 1.50

8489 - 8494 PB L 70337 Dyes obtained from ortho-substituted aromatic amines. By Schmidt and Retter. Apr 15, 1935. In German. 1.50

8495 - 8503 PB L 70337 Dyes produced from aromatic taurines and homologous sulfoalkyl compounds. By Müller and Schommer. Apr 15, 1935. In German. 1.50

8504 - 8508 PB L 70337 Sulfonation of basic naphthophenosafranines by means of oleum. By Huber. Apr 15, 1935. In German. 1.50

8509 - 8511 PB L 70337 Introduction of sulfonic groups into basic isorosindulines by means of bisulfite. By Huber. Apr 15, 1935. In German. 1.50

8512 - 8525 PB L 70337 Quinoxaline dyes. By Teupel and Schepss. Apr 15, 1936. In German. 1.50

8526 - 8532 PB L 70337 Metal complexes from o,o'-dihydroxy-azomethine compounds as pigment dyes. By K. Schmidt. Apr 15, 1936. In German. 1.50

8533 - 8548 PB L 70337 Polymethine dyes. By Müller and others. Apr 15, 1936. In German. 2.00

8549 - 8554 PB L 70337 New metal compounds of the gallo dyes. By Huber. Apr 15, 1936. In German. 1.50

8555 - 8566 PB L 70337 Dyes produced from beta-naphthol-3, 6,7-trisulfonic acid. By Schepss. Apr 15, 1936. In German. 1.50

8567 - 8573 PB L 70337 Dyes produced from o-aminodiphenyl derivatives. By Müller and others. Apr 15, 1936. In German. 1.50

8574 - 8578 PB L 70337 Dyes obtained from p- and o-isopropylbenzaldehyde. By Müller. Apr 15, 1936. In German. 1.50

8579 - 8589 PB L 70337 Light-fast rhodamine dyes from 2,4-dichlorobenzophenone derivatives. By Schommer. Apr 15, 1936, In German. 1.50

8590 - 8603 PB L 70337 Mordant dyes of the naphthophenone-safranine series. By Huber. May 24, 1937. In German. 1.50

8604 - 8608 PB L 70337 Water-soluble polymethine dyes from p-aminobenzaldehydes and picoline-iodoethylate. By Berres. May 24, 1937. In German. 1.50

8609 - 8619 PB L 70337 Metal compounds of azomethines as pigment dyes. By K. Schmidt. May 24, 1937. In German. 1.50

8620 - 8624 PB L 70337 Experiments for the production of dyes of the imidazole series. By Retter. May 24, 1937. In German. 1.50

8625 - 8632 PB L 70337 Color salts from basic polymethine and acid heavy metal-azo or triphenylmethane dyes. By Retter. May 24, 1937, In German. 1.50

8633 - 8652 PB L 70337 Phthalocyanines. By Gassner and Bienert. May 18, 1937. In German. 1.50

8653 - 8661 PB L 70337 Sulfamides of copper-phthalocyanine. By Hoyer. May 24, 1937. In German. 1.50

8662 - 8667 PB L 70337 Tetrabenzo - Azoporphines. By Raab. May 24, 1937. In German. 1.50

8668 - 8673 PB L 70337 Acid quinoxaline dyes from isatine and other o-diketones. By Schepss. May 24, 1937. In German. 1.50

8674 - 8679 PB L 70337 Spiropyranes. By Berres. May 24, 1937. In German. 1.50

8680 - 8687 PB L 70337 Substantive green dyes of the phthalocyanine series. By Hoyer and Schroter. Jun 14, 1937. In German. 1.50

8688 - 8696 PB L 70337 Basic triaryl methane dyes with alkyl groups of high molecular

weight. By Schepss.
May 2, 1938. In German. 1.50

8697 - 8712 PB L 70337 Acid violets from vic.-m-xylidines. By K. Schmidt.
May 2, 1938. In German. 2.00

8713 - 8721 PB L 70337 Action of secondary aromatic amines on triphenyl methane dyes with interchangeable groups in p-position to the central carbon atom. By K. Schmidt.
May 2, 1938. In German. 1.50

8722 - 8731 PB L 70337 Styryl dyes of the quinoxaline series. By Müller.
May 2, 1938. In German. 1.50

8732 - 8742 PB L 70337 New brown chromoxane dyes. By Kern. May 2, 1938.
In German. 1.50

8743 - 8757 PB L 70337 Dipyrazolonyl, or diacetoacetic acid phenyl methanes and their dyes. By Retter.
May 5, 1938. In German. 1.50

8758 - 8765 PB L 70337 Acid blues, fast to light, produced from sec. butyl-m-tolyl-taurine. By Schepss. May 3, 1939.
In German. 1.50

8766 - 8775 PB L 70337 Methine dyes obtained from 5-fluoro, -5-bromo-, and 5-trifluoromethyl indolines. By Retter. May 3, 1938.
In German. 1.50

8776 - 8783 PB L 70337 Mordant dyes of the naphthopheno safranine series.
By Huber and Petzold. May 3, 1939.
In German. 1.50

8784 - 8794 PB L 70337 Substantive dyes of the naphthopheno-safranine series. By Huber and Petzold. May 3, 1939.
In German. 1.50

8795 - 8806 PB L 70337 Dipyrazolonyl phenyl methane compounds as "Eulane" (mooth-proofing). By Retter.
May 3, 1939. In German. 1.50

8807 - 8809 PB L 70337 8807 - 8809 contains title pages only, no reports.
In German. 1.50

8810 - 8814 PB L 70337 Oxazines and thiazines.
May 14, 1934. In German. 1.50

8815 - 8830 PB L 70337 Acid hydrol and formaldehyde dyes. By Boger. n.d. In German. 2.00

8831 - 8835 PB L 70337 Triphenyl methane dyestuffs from o-amino-diphenyl. By Böger.
n.d. In German. 1.50

8836 - 8845 PB L 70337 Acetate rayon dyes. By Matthesen. n.d. In German. 1.50

8846 - 8851 PB L 70337 Oxidation of methanes and hydrols to the corresponding Michler ketones. By Matthesen. n.d.
In German. 1.50

8852 - 8854 PB L 70337 Acetone - anil. By Reddelien. n.d. In German. 1.50

8855 - 8866 PB L 70337 Secondary alkylanilines from Schiff's bases. Tricolors from Pinacolyl-Anilines and other related bases. By Reddelien and others. n.d. In German. 1.50

8867 - 8869 PB L 70337 New Polyene dyestuffs. By Baumann. n.d. In German. 1.50

8870 - 8878 PB L 70337 Research on Guinea brown (cf. nitro-amino-azine).
By Benade. n.d. In German. 1.50

8879 - 8881 PB L 70337 Alkylated phthalocyanines. By Thum and Baumann. n.d
In German. 1.50

8882 - 8889 PB L 70337 Tricolors from secondary butylanilines having hydroxy-groups in the aliphatic chain. By Richter. n.d. In German. 1.50

8890 - 8892 PB L 70337 Tricolors from alkyl anilines with a branched aliphatic chain. By Richter. n.d. In German. 1.50

8893 - 8895 PB L 70337 Acid tricolor dyes from n-butyl-anilido-ethane-thiosulfonic acid. By Richter. n.d. In German. 1.50

8896 - 8898 PB L 70337 Polymethine dyes from secondary p-alkylamino-benzaldehydes. By Richter. n.d. In German. 1.50

8899 - 8903 PB L 70337 New Astrazone dyes. By Richter. n.d. In German. 1.50

8904 - 8905 PB L 70337 Chromoxane dyes with substituted secondary butyl radicals. By Richter. n.d. In German. 1.50

8906 - 8910 PB L 70337 N-substituted o-nitranilins derivatives. By Thum.
n.d. In German. 1.50

8910a -8947 PB L 70337 Acidic, substituted benzaldehyde dyes. By Moehrke (?).
May 9, 1934. In German. 4.00

8948 - 8951 PB L 70337 Triphenyl methane dyes.
May 11, 1934. In German. 1.50

8952 - 8953 PB L 70337 Oxazines. By Hess.
Apr 12, 1935. In German. 1.50

8954 - 8977 PB L 70337 Safranines. By Hess. Apr 11, 1935.
In German. 2.50

8978 - 8988 PB L 70337 Indole dyes. By Wolff. Apr 12, 1935.
In German. 1.50

8989 - 8991 PB L 70337 Brown Acridon dyes for leather. By Hess. Apr 14, 1936.
In German. 1.50

8992 - 8995 PB L 70037 Indole wool fast blues. By Wolff. Apr 14, 1936.
In German. 1.50

8996 - 8998 PB L 70037 Synthesis of acid greens which are fast to light and alkali. By Wolff. Apr 14, 1936.
In German. 1.50

8999 - 9000 PB L 70037 Ketone dyes capable of being further treated with chromium. By Wolff. Apr 14, 1936.
In German. 1.50

9001 - 9003 PB L 70037 Acid yellows fast to light, produced from tribasic aldehyde. By Schäfer. Apr 14, 1936.
In German. 1.50

9004 - 9005 PB L 70037 Dyes from 1-methylindole -2,3-dicarboxylic acid. By Beniers (?).
Apr 14, 1936. In German. 1.50

9006 - 9008 PB L 70037 The effect of sulfonic acid, monohydrate, and fuming sulfuric acid on p-amidodiphenylamine. By Hess. Apr 14, 1936.
In German. 1.50

9039 - 9020 PB L 70337 Triphenyl methane dyes. By Wolff. n.d. In German. 1.50

9021 - 9027 PB L 70337 Acid indole wool dyes. By Wolff. n.d. In German. 1.50

Dyes (contd)

9028 - 9030 PB L 70337 **Naphthophenazine sulfonic acids capable of being treated with chromium.** By Hess. n.d. In German. 1.50

9031 - 9059 PB L 70337 **Dyes produced from hydroxytrimellitic acids.** By Eckert and Schilling. May 19, 1937. In German. 3.00

9060 - 9062 PB L 70337 **Experiments with Guinea Brown.** By Hess. n.d. In German. 1.50

9063 - 9081 PB L 70337 **Triphenylmethane dyes.** By Beniers and Wolff. Apr 21 and 26, 1938. In German. 2.00

9082 - 9084 PB L 70337 **Dyestuffs from 3,6-dichloroxanthone.** By Wolff, and Frank. Apr 28, 1938. In German. 1.50

9085 - 9091 PB L 70337 **Triphenylmethane dyes capable of being treated with chromium.** By Wolff and Frank. Apr 29, 1938. In German. 1.50

9092 - 9096 PB L 70337 **Basic indole-ketone dyes for viscose and "Vistra".** By Wolff. Apr 27, 1938. In German. 1.50

9097 - 9103 PB L 70337 **Production of 3-hydroxybenzaldehyde-4-carboxylic acid.** By Wolff and Frank. Apr 26, 1938. In German. 1.50

9104 - 9106 PB L 70337 **Rhodamine with sulfoethyl groups.** By Brunner. Apr 27, 1939. In German. 1.50

9107 - 9112 PB L 70337 **Dyes produced from substituted indolines.** By Freyberg. Apr 29, 1939. In German. 1.50

9113 - 9130 PB L 70337 **Triphenylmethane- and polymethine dyes.** By Moehrke and others. Apr 25, 1939. In German. 2.00

9131 - 9158 PB L 70337 **Hydroxytrimellitic acids.** By Eckert and others. Apr 24 and 25, 1939. In German. 3.00

9159 PB L 70337 Title page only, no report. In German. 1.50

9160 - 9178 PB L 70337 **Benzaldehyde dyes.** May 14, 1934. In Germzn. 2.00

9179 - 9190 PB L 70337 **Triphenylmethane dyes.** May 14, 1934. In German. 1.50

9191 - 9197 PB L 70337 **Basic hydrol dyes.** May 14, 1934. In German. 1.50

9198 - 9225 PB L 70337 **Rosanilines.** May 14, 1935. In German. 3.00

9226 - 9254 PB L 70337 **Fuchsins.** Apr 15, 1935. In German. 3.00

9255 - 9262 PB L 70337 **Triphenylmethane dyes.** Apr 15, 1935. In German. 1.50

9263 - 9266 PB L 70337 **Polymethine dyes insoluble in water.** By Coenen. Apr 15, 1936. In German. 1.50

9267 - 9284 PB L 70337 **Acid triphenylmethane dyes.** By Grotowsky and Coenen. Apr 15, 1936. In German. 2.00

9285 - 9317 PB L 70337 **Polymethine dyes.** By Coenen. May 24, 1937. In German. 3.50

9318 - 9326 PB L 70337 **Dye syntheses with new salicylaldehydes and aldehydesalicylic acids.** By Coenen. Apr 1939. In German. 1.50

9327 - 9341 PB L 70337 **Dye intermediates from allylphenols** By Coenen and others. Apr 1939. In German. 1.50

9342 - 9345 PB L 70337 **Indanthrene dyes.** By Naumann. 1933. In German. 1.50

9346 - 9365 PB L 70337 **Vat dyes.** By Fischer and Mattern. n.d. In German. 2.00

9366 - 9383 PB L 70337 **New dyes of the dioxazine series.** By Greuns and others. Nov 1, 1934. In German. 2.00

9384 - 9392 PB L 70337 **Benzanthrone dyes.** By Quint (?). Oct 24, 1934. In German. 1.50

9393 - 9396 PB L 70337 **Oxidation of primary aromatic amines of high molecular.** By Roemer. Nov 5, 1934. In German. 1.50

9397 - 9403 PB L 70337 **Yellow dyes of the naphthalic acid series capable of being treated with chromium.** By Eckert. n.d. In German. 1.50

9404 - 9412 PB L 70337 **Chrome dyes of the aminoanthraquinoneoxazol series.** By Schlichenmaier and Berlin. Nov 6, 1934. In German. 1.50

9413 - 9421 PB L 70337 **Arylidoanthraquinones.** By v. Klenck. Oct 30, 1934. In German. 1.50

9422 - 9425 PB L 70337 **Quinophthalones.** By Schlichenmaier and Schörnig. Nov 1, 1934. In German. 1.50

9426 - 9433 PB L 70337 **Acid dyes of the anthraquinone series capable of being chrome-developed.** By Diefenbach and others. Nov 5, 1934, Nov 2, 1934. In German. 1.50

9434 - 9440 PB L 70337 **Anthracene-peri-dicarboxylic acids.** By Eckert and Braunsdorf. Oct 24, 1934. In German. 1.50

9441 - 9443 PB L 70337 **Indigo dyes from 4,3-pyrene hydroxythiophenes.** By Runne and Corell. Nov 2, 1934. In German. 1.50

9444 - 9445 PB L 70337 **Acenaphthene quinone.** By Sieber. Oct 23, 1934. In German. 1.50

9446 - 9461 PB L 70337 **Investigations regarding the pyrene series.** By Wolfram and others. Nov 5, 1934. In German. 2.00

PB L 70337-S. I.G. FARBENINDUSTRIE A.G., **Reports on dyes.** (FIAT Microfilm Reel C-8, Frames 8177-8461, abstract cards). 1934 - 1939. 189 p. Price: Microfilm-$4.00 - Photostat-$13.00.
These are abstract cards of the reports on reel C 8, PB 70337, listed above. The abstracts have been prepared by FIAT personnel in Germany. In English.

PB L 70339. I.G. FARBENINDUSTRIE A.G. **Research on dyes and dye intermediates.** (FIAT Microfilm Reel C-10, Frames 10901-12172) (See also FIAT Microfilm Reel C-9, PB 70338) 1934-1942. 1271 f. Price: Microfilm-$6.00 - Enlargement Print-$127.50
This FIAT microfilm reel contains reports on research for new dyes and dye intermediates. 123 individual reports, listed below, may be obtained as enlargement prints. Please include PB and frame numbers when ordering an individual item. These reports are in German.

Dyes (contd)

Frame	Title	Price
10901-10920 PB L 70339	Production of "Anthrasols" from azodyestuffs. By Besler and Braunsdorf. Apr 25, 1941. In German.	$2.00
10921-10929 PB L 70339	New possibilities for the application of anthracene. By Kraenslein. Apr 26, 1941. In German.	1.50
10930-10936 PB L 70339	Vat dyes containing trifluoroethoxy groups. By Scherer. May 6, 1942. In German.	1.50
10937-10939 PB L 70339	Note on Bz-2-phenoxy-benzanthrone. By Zahn. May 13, 1942. In German.	1.50
10940-10943 PB L 70339	"Indanthrenrotviolett RH." By Hoffmann. May 6, 1942. In German.	1.50
10944-10954 PB L 70339	"Anthrasols" from azodyes and "Indanthrengrau" M and MG. By Besler and Braunsdorf. May 13, 1942. In German.	1.50
10955-10965 PB L 70339	"Anthrasols" of indigoide dyestuffs. By Schlegel. May 13, 1942. In German.	1.50
10966-10971 PB L 70339	Dioxazine dyes with carboxylic arylamide groups (19th communication on dioxazine dyes). By Thiess. May 13, 1942. In German.	1.50
10972-10975 PB L 70339	Substituted 1-amino-anthraquinones as bases for Naphtol AS dyestuffs. (4th report). By Mueller. May 13, 1942. In German.	1.50
10976-10978 PB L 70339	A new method for the preparation of 1-hydroxy-3-amino-anthraquinone. By Heyna. May 13, 1942. In German.	1.50
10979-10981 PB L 70339	Aminoazapyrene. By Thiess. May 13, 1942. In German.	1.50
10982-10985 PB L 70339	The importance of the dispersion of Anthrasols. By Besler. May 13, 1942. In German.	1.50
10986-10996 PB L 70339	Azole derivatives of the naphthalic acid. By Wilke. Apr 28, 1942. In German.	1.50
10997-11001 PB L 70339	Verification of patent applications of competitive firms. By Roemer. May 5, 1942. In German.	1.50
11002-11004 PB L 70339	Verification of the German patent application of the firm Durand & Huguenin-D.81142 IV/8n (I.C.Nr. 2609/1041). By Besler. May 6, 1942. In German.	1.50
11005-11007 PB L 70339	Verification of the Russian steaming process for the development of indigosols by means of ammonium chromate. By Besler. May 6, 1942. In German.	1.50
11008-11014 PB L 70339	Comparison of Indigosol and Indanthren dyeings. By Poetzsch. n.d. In German.	1.50
11015-11018 PB L 70339	Vat preparations. By Poetzsch. n.d. In German.	1.50
11019-11020 PB L 70339	Dyes of the Bromamine Acid series substituted by sulfamide and carbamyl radicals. By Weinand and Bamberger. Oct 22, 1934. In German.	1.50
11021-11026 PB L 70339	Dyes derived from the anthraquinonyl-2-methane-sulfonic acid. By Bienert. Oct 16, 1934. In German.	1.50
11027-11030 PB L 70339	Dyestuffs of the monophthaloyl-carbazole series (2nd report.) By Mieg. Oct 24, 1934. In German.	1.50
11031-11033 PB L 70339	A new synthesis of naphthoquinone carbazoles. By Mieg and Burneleit. Oct 25, 1934. In German.	1.50
11034-11039 PB L 70339	Ring closures of 1(1'-naphthylamino)-anthraquinones and their derivatives. By Mieg. Oct 31, 1934. In German.	1.50
11040-11045 PB L 70339	A new type of vat dyes of the anthraquinone series. By Wieners. Oct 23, 1934. In German.	1.50
11046-11048 PB L 70339	A derivative of the N-(Bz-1-benzanthronyl)-anthrapyridone. By Baumann. Oct 24, 1934. In German.	1.50
11049-11054 PB L 70339	Copperphthalocyanine. By Gassner, Bienert and Baumann. Nov 3, 1934. In German.	1.50
11055-11059 PB L 70339	The application of carbon black in textile printing. By Berthold. Oct 30, 1934. In German.	1.50
11060-11065 PB L 70339	The application of reduced vat and sulfur dyes as pigments for dyeing rayon while spinning. By Berthold. Oct 19, 1934. In German.	1.50
11066-11070 PB L 70339	New condensation products from 1,1'-dinaphthyl-3,4,3',4'-diquinone and amino anthraquinone. By Bollweg. Nov 5, 1934. In German.	1.50
11071-11075 PB L 70339	Nitration of Indanthrene. By Haller. Nov 5, 1934. In German.	1.50
11076-11082 PB L 70339	Application of 4,8-dichloro-2-naphthylamine for creating condensed ring systems. By Kramer. Nov 8/9, 1934. In German.	1.50
11083-11086 PB L 70339	New method for the production of "Kuepenorange Nr. 132." By Kramer. Dec 2, 1934. In German.	1.50
11087-11093 PB L 70339	Carbazoles of the anthraquinone-2,1 (N)-benzacridone series. By Bauer. Oct 26, 1934. In German.	1.50
11094-11111 PB L 70339	Six-month report of our out of town collaborator, Prof. Dr. Pummerer, Erlangen. Apr 29, 1934. In German.	1.50
11112-11113 PB L 70339	Experiments on the preparation of phenanthridones of the anthraquinone series. By Mieg and others. Nov 5, 1934. In German.	1.50
11114-11117 PB L 70339	Pyrazolone azo dyes of the anthraquinone series. By Kieser. Nov 19, 1934. In German.	1.50
11118-11124 PB L 70339	Acid wool dyes substituted by sulfamide and carbamyl groups. By Weinand and Bamberger. Mar 21, 1935. In German.	1.50
11125-11130 PB L 70339	Wool vat dyes with sulfamide groups. By Weinand and Bamberger. Mar 22, 1935. In German.	1.50
11131-11134 PB L 70339	1-Hydroarylamino-4-arylamino-anthraquinone-6-sulfonic acid. By Weinand and Bamberger. Mar 11, 1935. In German.	1.50
11135-11140 PB L 70339	New chrome dyes of the anthraquinone series. By Raab. Feb 20, 1935. In German.	1.50
11141-11143 PB L 70339	Mixture of substituted vat dyes of the iso- and terephthaloyl-amino-anthraquinone series. By Mieg and others. Mar 23, 1935. In German.	1.50
11144-11158 PB L 70339	Phenanthridones of the anthraquinone series. By Mieg and others. Mar 12, 1935. In German.	1.50

11159-11163 PB L 70339 — Preparation of phenanthridones by decomposition of suitable ring systems containing nitrogen. By Wieners. Mar 11, 1936. In German. 1.50

11164-11167 PB L 70339 — Oxidative linking of anthraquinone derivatives. By Mieg. Mar 29, 1935. In German. 1.50

11168-11184 PB L 70339 — 1,10-Anthraquinone and some of its hydroxy derivatives. By Bamberger. Mar 21, 1935. In German. 2.00

11185-11203 PB L 70339 — Copper phthalocyanine (blue pigment). By Bienert. Mar 18, 1935. In German. 2.00

11204-11207 PB L 70339 — Phthalocyanines (supplement). By Bienert. Apr 5, 1935. In German. 1.50

11208-11214 PB L 70339 — Bz-Carbazoles from anthraquinone-2.1-(N)-benz-acridones. - (3rd continuation). By Bauer. Mar 15, 1935. In German. 1.50

11215-11219 PB L 70339 — Carbazoles from thioindigos with added anthraquinone radicals. By Bauer. Mar 15, 1935. In German. 1.50

11220-11226 PB L 70339 — Bz-Polymethyl-anthraquinone-2,1(N)-benzacridones. By Bauer. Mar 18, 1935. In German. 1.50

11227-11234 PB L 70339 — Fluorination of vat dyes. By Rösch. Mar 14, 1935. In German. 1.50

11235-11240 PB L 70339 — Dinaphthoyl benzene. By Rösch. Mar 15, 1935. In German. 1.50

11241-11244 PB L 70339 — Experiments on a new method for the preparation of indanthrene tetraesters. By Rösch. Mar 18, 1935. In German. 1.50

11245-11252 PB L 70339 — Experiments on the preparation of vat dyes from naphthostyrils. By Rösch. Mar 21, 1935. In German. 1.50

11253-11255 PB L 70339 — A pyranthrone from 2,3-cyclopenteno-anthraquinone. By Kramer. Mar 25, 1935. In German. 1.50

11256-11267 PB L 70339 — Summarizing report on research on pyrene. By Vollmann. Mar 19, 1935. In German. 1.50

11268-11272 PB L 70339 — Studies in the chrysene series. By Schmelzer. Mar 20, 1935. In German. 1.50

11273-11278 PB L 70339 — Researches in the 9, 10-benzophenanthrene series. By Schmelzer and Muth. Mar 15, 1935. In German. 1.50

11279-11285 PB L 70339 — Methyl alloxazines and other substances with chromogen of analogous structure. By Delfs. Mar 29,1935. In German. 1.50

11286-11291 PB L 70339 — Condensation products and their sulfonic acids from acylamino arylamino anthraquinones. In German. 1.50
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11292-11295 PB L 70339 — Chrome dyes of the anthraquinone series. By Raab. Oct 9, 1935. In German. 1.50

11296-11303 PB L 70339 — Vat dyes from aromatic dicarboxylic chlorides and two different amino compounds. By Mieg and Wieners. Oct 14, 1935. In German. 1.50

11304-11306 PB L 70339 — Verification of the American patents of Dupont concerning dyes from 5-(8)-nitroanthraquinone-2-carboxylic acid. By Baumann and Schwechten. Oct 21, 1935. In German. 1.50

11307-11310 PB L 70339 — Chlorinated anthraquinone-2-1, 6-5-benzodiacridones. By Raab. Oct 16, 1935. In German. 1.50

11311-11313 PB L 70339 — The vatting property of the quinacridone. By Raab. Oct 25/26, 1935. In German. 1.50

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11318-11324 PB L 70339 — Derivatives of pyrazole anthrone and of Pyrazole anthrone Yellow. By Baumann and Schwechten. Oct 10, 1935. In German. 1.50

11325-11339 PB L 70339 — Derivatives of phthaloyl quinazolines. By Baumann and Schwechten. Oct 16, 1935. In German. 1.50

11340-11353 PB L 70339 — Phthalocyanines. By Bienert. Nov 10, 1935. In German. 1.50

11354-11359 PB L 70339 — Research in the indigosol field. By Zeh and Bollweg. Oct 18, 1935. In German. 1.50

11360-11366 PB I 70339 — A new indigosol brown. By Bauer. Oct 17, 1935. In German. 1.50

11367-11382 PB L 70339 — Research in the acridone series. By Bauer and Hoyer. Oct 21, 1935. In German. 2.00

11383-11385 PB L 70339 — B 2 substituted anthraquinone-2.1 (N), 6.5 (N)-dibenzodiacridone. By Bauer. Oct 15, 1935. In German. 1.50

11386-11388 PB L 70339 — Some trifluoromethylanthraquinone-2, 1(N)-benz-acridones. By Hoyer. n.d. In German. 1.50

11389-11395 PB L 70339 — New dyes from anthraquinone-2.1 (N):1.'2'(N)-benzoacridone-Bz-carboxylic acids. By Kramer. Oct 17, 1935. In German. 1.50

11396-11397 PB L 70339 — New method for the production of "Vat Orange No. 132." By Kramer. Oct 17, 1935. In German. 1.50

11398-11403 PB L 70339 — Handwritten report without title, corresponding word for word to the report on reges 11389-11395. In German. 1.50

11404-11410 PB L 70339 — Fluorination of vat dyes. (2nd part). By Rösch. Oct 18, 1935. In German. 1.50

11411-11419 PB L 70339 — Vat dyes of the oxazine series. By Kramer. Nov 18, 1935. In German. 1.50

11420-11424 PB L 70339 — Tauripes of the indanthrene series. By Rösch. Oct 21, 1935. In German. 1.50

11425-11428 PB L 70339 — 1,2-Benzophenazine-anthraquinone-3-sulfonic acids. (Preliminary report). By Weinand and Bamberger. Oct 21, 1935. In German. 1.50

11429-11432 PB L 70339 — The nitration of anthraquinone-2-sulfonic acid. By Weinand and Bamberger. Feb 26, 1936. In German. 1.50

11433-11436 PB L 70339 — Monomethylated tyres of "Lichtgrau." By Weinand and Bamberger. Mar 4, 1936. In German. 1.50

11437-11441 PB L 70339 — Carbazolation by means of molecular compounds of aluminum chloride. By Mieg and Burneleit. Feb 26, 1936. In German. 1.50

Dyes (contd)

11442-11445 PB L 70339 — Penthiophene ring closure in the anthraquinone series. By Mieg and Wieners. Mar 3, 1936. In German. 1.50

11446-11450 PB L 70339 — Anthraquinone-1,2-dihydrotriazine. By Raab. Feb 20, 1936. In German. 1.50

11451-11455 PB L 70339 — Contribution to the formation of oxazoles in the anthraquinone series. By Raab. Feb 20, 1936. In German. 1.50

11456-11463 PB L 70339 — Diamino-anthraquinone-benzoacridones and derivatives. By Baumann and Raab. Mar 6, 1936. In German. 1.50

11464-11473 PB L 70339 — Anthraquinone-2,1 (N)-naphthalene acridones. By Berliner and Bauer. Feb 25, 1936. In German. 1.50

11474-11482 PB L 70339 — Derivatives of the 2-phenyl-4-chloro-quinazoline. By Baumann and Schwechten. Mar 3, 1936. In German. 1.50

11483-11487 PB L 70339 — Conversion products of the (N-1-anthraquinonyl-pyrazole anthrone. By Baumann and Schwechten. Mar 3, 1936. In German. 1.50

11488-11514 PB L 70339 — Phthalocyanines. By Bienert. Dec 31, 1935. In German. 3.00

11515-11521 PB L 70339 — Some phthalocyanines from diphenyl-maleic dinitrile and its substitution products. By Hoyer. Mar 2, 1936. In German. 1.50

11522-11530 PB L 70339 — Vat dyes of the naphthophenazine series. By Hoyer. Mar 6, 1936. In German. 1.50

11531-11534 PB L 70339 — Vat dyes from anthraquinone 2,1 (O)-1',2' (O)-xanthone carboxylic acids. By Kramer. Mar 10, 1936. In German. 1.50

11535-11542 PB L 70339 — Alpha-amido-anthraquinone leuco sulfuric esters and new indigosols prepared therefrom. By Rösch. Mar 2, 1936. In German. 1.50

11543-11550 PB L 70339 — Research on oxazine and thiazine compounds. By Haller. Mar 6, 1936. In German. 1.50

11551-11554 PB L 70339 — Chrome dyes from quinizarin sulfonic acids. By Raab. Sep 8, 1936. In German. 1.50

11555-11560 PB L 70339 — New dyes of the Bromamine Acid series. By Weinand and Bamberger. Sep 9, 1936. In German. 1.50

11561-11567 PB L 70339 — Substantive dyes of the Bromamine Acid series. By Weinand. Sep 14, 1936. In German. 1.50

11568-11572 PB L 70339 — Wool dyes of the monoamino-1,4 di-anthrimide series. By Weinand and Bamberger. Sep 9, 1936. In German. 1.50

11573-11576 PB L 70339 — Test of "Erioanthracenrainblau BRL." (Geigy). By Weinand. Sep 14, 1936. In German. 1.50

11577-11581 PB L 70339 — Caustic alkali carbazole as condensing agent in the production of "Indanthrengelb 3R" and "3RT." By Tust. Sep 15, 1936. In German. 1.50

11582-11584 PB L 70339 — New wool vat dyes of the anthraquinone series. By Raab. May 13, 1936. In German. 1.50

11585-11608 PB L 70339 — Derivatives of phthaloyl quinazolines. By Baumann and Schwechten. Sep 16, 1936. In German. 2.50

11609-11614 PB L 70339 — Green vat dyes from anthraquinone-benzoacridone-4-anilino-carboxylic acids. By Baumann and others. Sep 15, 1936. In German. 1.50

11615-11617 PB L 70339 — Verification of German patent application I 53314 IVa/22b and French patent 797382 of the I.G.I. By Baumann and Schwechten. Sep 15, 1936. In German. 1.50

11618-11633 PB L 70339 — "Tricota" dyed while spinning. By Berthold. Sep 14, 1936. In German. 2.00

11634-11641 PB L 70339 — Phthalocyanines (5th report). By Bienert. Sep 7, 1936. In German. 1.50

11642-11653 PB L 70339 — 8-Hydroxy-1,2-naphtho-phthaloyl-phenazines. By Hoyer. Sep 29, 1936. In German. 1.50

11654-11666 PB L 70339 — 4-Aroyl amino-6'-chloro-anthraquinone-2,1 (N)-benzoacridones and their derivatives. By Bauer and Rösch. Sep 10, 1936. In German. 1.50

11667-11679 PB L 70339 — 2 (N)-benzene-1-benzanthrone hydro acridine and derivatives. By Rösch. Aug 28, 1936. In German. 1.50

11680-11684 PB L 70339 — A green substantive cotton dye of the Bromamine Acid series. By Kramer. Sep 25, 1936. In German. 1.50

11685-11689 PB L 70339 — Nitration of 1,5-diaroylamino-anthraquinone. By Haller. Sep 28, 1936. In German. 1.50

11690-11696 PB L 70339 — Rubicene and its application for the preparation of dyes. By Zeh. Sep 1, 1936. In German. 1.50

11697-11703 PB L 70339 — Vat dyes from dicarboxylic chlorides with amino-anthraquinones and amino-azobenzene. By Weinand and Bamberger. Feb 17, 1937. In German. 1.50

11704-11706 PB L 70339 — Carbazolation of di-(benzoylamino-anthraquinonyl)-arylene-diamines. By Mieg. Feb 11, 1937. In German. 1.50

11707-11716 PB L 70339 — New imidazoles of the anthraquinone series. By Baumann and Schwechten. n.d. In German. 1.50

11717-11724 PB L 70339 — Further tests in the quinazoline and phthaloyl-quinazoline series. By Baumann and Schwechten. Feb 23, 1937. In German. 1.50

See reports on pages 11325-11339 and 11585-11608.

11725-11728 PB L 70339 — O-Quinones of the carbazole series as vat dyes. By Burneleit. Feb 16, 1937. In German. 1.50

11729-11739 PB L 70339 — Experiments on the preparation of a biphenanthridone of the anthraquinone series. By Rösch. Mar 1, 1937. In German. 1.50

11740-11747 PB L 70339 — New method for the preparation of anthraquinone-2,1 (N); 1', 2' (N)-naphthacridones. By Haller. Feb 24, 1937. In German. 1.50

11748-11756 PB L 70339 — Indigosols of carbazoles from di-anthraquinonylamines. By Bauer. Feb 18, 1937. In German. 1.50

11757-11761 PB L 70339 — Dyestuffs of the "Alizarin-lichtgrau" series. By Mieg and Raab. Feb 10, 1937. In German. 1.50

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Dyes (contd)

11762-11766 PB L 70339 — Wool dyes of the anthraquinone acridone series. By Raab. Feb 12, 1937. In German. 1.50

11767-11774 PB L 70339 — Water-soluble acetate rayon dyes. By Baumann and Schwechten. Feb 24, 1937. In German. 1.50

11775-11777 PB L 70339 — Water-soluble, violet acetate rayon dyes. By Weinand. Feb 24, 1937. In German. 1.50

11778-11783 PB L 70339 — Experiments in the phthalocyanine series. By Hoyer. Mar 5, 1937. In German. 1.50

11784-11786 PB L 70339 — The preparation of o-dinitriles from o-halogen- and o-cyano-sulfonic acids. By Raab. Feb 15, 1937. In German. 1.50

11787-11790 PB L 70339 — Condensation of secondary aromatic amines with haloanthraquinones. By Mieg. Feb 11, 1937. In German. 1.50

11791-11797 PB L 70339 — Action of benzyl cyanide upon o-halogen-anthraquinone-carboxylic acids in the presence of cuprous cyanide. By Baumann and Schwechten. Feb 17, 1937. In German. 1.50

11798-11808 PB L 70339 — Bz-1-arylamino-benzanthrones. By Rösch. Feb 22, 1937. In German. 1.50

11809-11813 PB L 70339 — Yellow vat dyes. By Weinand and Bamberger. Nov 13, 1937. In German. 1.50

11814-11820 PB L 70339 — 1-Benzoylamino-anthraquinone-3-carboxylic acid, thiazole-anthrone-3-carboxylic acid and dyes therefrom. By Raab. Nov 16, 1937. In German. 1.50

11821-11827 PB L 70339 — New dyes from anthraquinone-2,1 (N)-1', 2' (N)-6'-amino-benzoacridones and analogous thioxanthones. By Bauer. Nov 4, 1937. In German. 1.50

11828-11838 PB L 70339 — New dicarbazoles from anthraquinone-2,1 (N)-1', 2' (N)-benzacridones with a carbazole group in the benzene ring. By Bauer and Kramer. Sep 20, 1937. In German. 1.50

11839-11846 PB L 70339 — New vat dyes derived from anthraquinone-2,1 (N)-1',2' (N)-3'-phenoxybenzo-acridone. By Hoyer. Nov 11, 1937. In German. 1.50

11847-11852 PB L 70339 — A new iso-dibenz-pyrene-quinone synthesis. By Rösch. Oct 25, 1937. In German. 1.50

11853-11857 PB L 70339 — Anthraquinone-benzene-dicarbazoles and their indigosols. By Rösch. Nov 4, 1937. In German. 1.50

11858-11874 PB L 70339 — Aza- and diaza-anthracenes and -anthraquinones. By Baumann and Schwechten. Nov 23, 1937. In German. 2.00

11875-11880 PB L 70339 — Anthraquinone-1,2- and -2,3-pyrazoles. By Baumann and Schwechten. Nov 29, 1937. In German. 1.50

11881-11884 PB L 70339 — Hydrazines of the beta-naphthoquinone series. By Burneleit. Oct 13, 1937. In German. 1.50

11885-11894 PB L 70339 — Reactions by means of molecular compounds of aluminum chloride. By Wieners and Mieg. Dec 2, 1937. In German. 1.50

11895-11899 PB L 70339 — Water-soluble leuco esters of vat dyes. By Mieg and Wieners. Nov 30, 1937. In German. 1.50

11900-11909 PB L 70339 — Neutral dyeing wool dyes. By Weinand and Bamberger. Nov 30, 1937. In German. 1.50

11910-11914 PB L 70339 — Substantive dyes of the Brom amine Acid series. By Weinand and Bamberger. Nov 15, 1937. In German. 1.50

11915-11917 PB L 70339 — Acid wool dyes of the anthraquinone series from o-sulfo-benzoic anhydride. By Wieners. Nov 23, 1937. In German. 1.50

11918-11944 PB L 70339 — Experiments on the production of "Tricete" dyed while spinning. By Berthold and Pabst. Sep 1, 1937. In German. 3.00

11945-11983 PB L 70339 — Phthalocyanines. (VIth report). By Gassner and Bienert. Nov 8, 1937. In German. 4.00

11984-11994 PB L 70339 — Sulfamides of the phthalo cyanine series. By Hoyer and Nadler. Nov 16, 1937. In German. 1.50

11995-12005 PB L 70339 — Substantive green dyes of the phthalo cyanine series. By Hoyer and others. Nov 20, 1937. In German. 1.50

12006-12012 PB L 70339 — Tetra benzo-aza-porphin. By Raab. May 24, 1937. In German. 1.50

12013-12017 PB L 70339 — Verification of the English patent applications 26715/36 and 26716/36 (Derek-Richter): Method for the preparation of purpurin carboxylic acid. By Weinand and Bamberger. Oct 13, 1937. In German. 1.50

12018-12020 PB L 70339 — Test of Carbolan Blue BS of the I.G.I. By Weinand. Nov 22, 1937. In German. 1.50

12021-12026 PB L 70339 — The electro chemical reduction of quinizarin to leucoquinizarin. By Raab. Oct 14, 1937. In German. 1.50

12027-12030 PB L 70339 — A new way for the preparation of oxazine substances. (Preliminary report). By Burneleit. Nov 16, 1937. In German. 1.50

12031-12033 PB L 70339 — Tetra esters of the 3,3'-dibromo-1, 2-anthraquinone azine. By Haller. Jan 7, 1938. In German. 1.50

12034-12045 PB L 70339 — Experiments on the condensation of aroylamino-anthraquinones substituted in the aroyl radical. By Wieners and Mieg. Jun 14, 1938. In German. 1.50

12046-12053 PB L 70339 — Anthraquinonyl oxazoles. By Baumann and Schwechten. Jun 3, 1938. In German. 1.50

12054-12059 PB L 70339 — Vat dyes from 3-amino-anthraquinone-2, 1 (N)-acridones. By Baumann and Schwechten. Jun 4, 1938. In German. 1.50

12060-12072 PB L 70339 — Phenoxyanthraquinone-benzene-acridones. By Hoyer. Jun 14, 1938. In German. 1.50

12073-12089 PB L 70339 — Derivatives of the 2-phenyl-anthraquinone. By Kramer. Jun 16, 1938. In German. 2.00

12090-12093 PB L 70339 — Tetra esters of the 3,3'-diiod-anthraquinone. By Haller. Jun 16, 1938. In German. 1.50

12094-12098 PB L 70339 — Preparation of water-soluble leuco esters of vat dyes. By Mieg and Wieners. Jun 15, 1938. In German. 1.50

Dyes (contd)

12099-12101 PB L 70339 — Acid wool dyes from hydroxyanthraquinone-dimethyl ether. By Weinand and Bamberger. Jun 10, 1938. In German. 1.50

12102-12109 PB L 70339 — Neutral dyeing wool dyes. By Weinand and Bamberger. Jun 13, 1938. In German. 1.50

12110-12113 PB L 70339 — Substantive dyes of the Brom amine Acid series. By Weinand and Bamberger. Jun 10, 1938. In German. 1.50

12114-12117 PB L 70339 — New dyes of the dioxazine series. By Burneleit. Jun 10, 1938. In German. 1.50

12118-12123 PB L 70339 — Mixed copper phthalocyanine sulfonic acids. By Rösch. Jun 16, 1938. In German. 1.50

12124-12127 PB L 70339 — The lactones of acylamino-anthraquinone-carboxylic acids and 2-phenyl-4-hydroxy-6,7-phthaloyl-quinazoline. By Baumann and Schwechten. May 31, 1938. In German. 1.50

12128-12140 PB L 70339 — The constitution of the products obtained by the action of chlorosulfonic acid upon copper phthalocyanine. By Nadler. Jun 16, 1938. In German. 1.50

12141-12151 PB L 70339 — Monophthaloyl carbazoles and their halogen derivatives. By Mieg and Wieners. n.d. In German. 1.50

12152-12158 PB L 70339 — Experiments on the condensation of aroylamino-anthraquinones substituted in the aroyl radical. By Mieg and Wieners. Dec 16, 1938. In German. 1.50

12159-12172 PB L 70339 — Vat dyes containing sulfur. By Baumann and Schwechten. Dec 8, 1938. In German. 1.50

PB L 70339-S. I.G. FARBENINDUSTRIE A.G. Research on dyes and dye intermediates. (FIAT Microfilm Reel C-10, Frames 10901-12172, abstract cards) 1934-1942. 177 p. Price: Microfilm-$4.00 - Photostat-$12.00

This item consists of abstracts of the reports on reel C-10, PB 70339, listed above. The abstracts have been prepared by FIAT personnel in Germany. In English.

PB L 70340. I.G. FARBENINDUSTRIE A.G. Research on dyes and dye intermediates. (FIAT Microfilm Reel C-11, Frames 12173-13224). 1933 - 1942. 1046f. Price: Microfilm-$6.00 - Enlargement Print-$105.00.

This FIAT microfilm reel contains 124 reports on research in the field of dyes and dye intermediates. Individual reports, listed below, are available as enlargement prints. Please include PB and frame numbers when ordering individual items. A number of color samples are reproduced in black and white only. In German.

Frames	Title	Price
12173 - 12178 PB L 70340	Naphthanthraquinone carbazoles. By Rösch. Nov 24, 1938. In German.	$1.50
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12185 - 12202 PB L 70340	Dicarbazoles of anthraquinone-2,1 (N)-1',2'(N)-benzene-acridones. By Bauer and Bollweg. Nov 17, 1938. In German.	2.00
12203 - 12209 PB L 70340	A new heterocyclic derivative of benzanthrone. By Baumann and Schwechten. Nov 25, 1938. In German.	1.50
12210 - 12220 PB L 70340	3,3-Dichloro oxindoles and their reaction products. By Haller. Nov 30, 1938. In German.	1.50
12221 - 12226 PB L 70340	Water-soluble leuco-esters of vat dyes. By Mieg and Wieners. Dec 12, 1938. In German.	1.50
12227 - 12233 PB L 70340	Halogenation of dyes with arylamine-residues. By Weinand. Nov 11, 1938. In German.	1.50
12234 - 12240 PB L 70340	Halogenation of 1 - arylamino - anthraquinones. By Weinand. Dec 5, 1938. In German.	1.50
12241 - 12243 PB L 70340	Testing of "Carbolanblau RS". By Weinand. Nov 18, 1938. In German.	1.50
12244 - 12254 PB L 70340	Octaphenyl-phthalocyanine. By Hoyer and Rickert. Nov 22, 1938. In German.	1.50
12255 - 12262 PB L 70340	Lacquer-soluble phthalocyanines and other dyes soluble in butyl acetate lacquer. By Nadler. Dec 2, 1938. In German.	1.50
12263 - 12290 PB L 70340	Ultra-violet-microscopic examination of different colors in their applicatory phase. By Berthold and Kircher. Dec 1, 1938. In German.	3.00
12291 - 12301 PB L 70340	Condensation of aroylamino-anthraquinones substituted in the aroyl radical. By Wieners and Mieg. Jun 9, 1939. In German.	1.50
12302 - 12308 PB L 70340	Vat dyes from diacylaminodianthraquinonyls and diacylaminoheli-anthrones. By Rösch. Jun 1, 1939. In German.	1.50
12309 - 12317 PB L 70340	Carbazoles of dibenzoylamino-dianthrimides with arylide radicals. By Mieg. Jun 7, 1939. In German.	1.50
12318 - 12328 PB L 70340	Carbazolation of 1-benzoylamino--5-arylamino- and 4-arylamino-anthraquinones and use of the carbazoles. By Rösch. May 26, 1939. In German.	1.50
12329 - 12353 PB L 70340	New dyes of the phthaloyl-quinazoline-group. By Baumann and Schwechten. May 31, 1939. In German.	2.50
12354 - 12361 PB L 70340	New synthesis of phthaloyl phenanthridones. By Wieners. Jun 7, 1939. In German.	1.50
12362 - 12367 PB L 70340	Halogenation of dibenzanthrone and isodibenzanthrone in fluorosulfonic acid. By Haller. Jun 1, 1939. In German.	1.50
12368 - 12376 PB L70340	Alkali melt of Bz-3-aroyl-benzanthrones. By Hoyer. May 30, 1939. In German.	1.50
12377 - 12379 PB L 70340	Indigoid dyes of naphthoquinone-carbazoles. By Burneleit. Jun 2, 1939. In German.	1.50
12380 - 12386 PB L 70340	Azo indigo sols from beta-hydroxyanthraquinone. By Suckfüll and others. Jun 8, 1939. In German.	1.50

12387 - 12393 PB L 70340 — Indigo sols from benzamino-anthraquinones. By Burneleit and others. Jun 8, 1939. In German. 1.50

12394 - 12403 PB L 70340 — Indigo sols of 1,4,- and 1,5-diacylaminoanthraquinones. By P. Kränslein. Jun 5, 1939. In German. 1.50

12404 - 12409 PB L 70340 — Indigo sols of oxazoles, thiazoles, imidazoles of 1,2 benzanthraquinone. By Rosch. Jun 2, 1939. In German. 1.50

12410 - 12415 PB L 70340 — Indigo sols of Cu-phthalocyanines. By Rosch. Jun 2, 1939. In German. 1.50

12416 - 12423 PB L 70340 — Halogenation of 1-arylamino-anthraquinones. By Weinand. Jun 6, 1939. In German. 1.50

12424 - 12429 PB L 70340 — Chloromethylsalicylic acid as chroming components in anthraquinone dyes. By Kramer. Jun 8, 1939. In German. 1.50

12430 - 12434 PB L 70340 — Verification of the American patent no. 2 151 634 (Du Pont), "Arylamino-, aryloxy-, hydroxy-anthraquinones". By Weinand. Jun 5, 1939. In German. 1.50

12435 - 12441 PB L 70340 — "Cellitonechtblaugrün B". By Baumann and Schwechten. Jun 4, 1939. In German. 1.50

12442 - 12478 PB L 70340 — Phthalocyanines. By Bienert and Thielert. May 5, 1939. In German. 4.00

12479 - 12482 PB L 70340 — Condensation of alpha-amino-anthraquinone with beta-chloronaphthalene. By Wieners and Baehr. May 31, 1939. In German. 1.50

12483 - 12489 PB L 70340 — Chlorine- and methyl-derivatives of naphthacene diquinones. By Hansen. May 30, 1939. In German. 1.50

12490 - 12493 PB L 70340 — Desensitizers of the anthraquinone series. By Gassner. Jun 13, 1939. In German. 1.50

12494 - 12498 PB L 70340 — Experiments in the anthraquinone benzacridone series. By Baumann and Schwechten. Feb 7, 1940. In German. 1.50

12499 - 12509 PB L 70340 — Oxidations with vanadic acid in sulfuric acid solution. By Baumann and Schwechten. Feb 10, 1940. In German. 1.50

12510 - 12515 PB L 70340 — Halogenation of 1-hexahydroanilino-4-arylamino-anthraquinones. By Weinand. Jan 9, 1940. In German. 1.50

12516 - 12518 PB L 70340 — "Alizarinblauschwarz" from quinizarine. By Raab. Jan 13, 1940. In German. 1.50

12519 - 12528 PB L 70340 — New dyes and reactions in the anthraquinone-acridine series. By Burneleit. Jan 25, 1940. In German. 1.50

12529 - 12544 PB L 70340 — Chrome dyes of the anthraquinone series. By Kramer. Feb 12, 1940. In German. 2.00

12545 - 12558 PB L 70340 — Phthalocyanines. By Bienert and Thielert. Jan 16, 1940. In German. 1.50

12559 - 12565 PB L 70340 — Sulfamides in the phthalocyanine series. By Nadler. Feb 7, 1940. In German. 1.50

12566 - 12571 PB L 70340 — Ester soluble "sapon fast" dyes. By Nadler. Feb 6, 1940. In German. 1.50

12572 - 12578 PB L 70340 — New method for fixing dyes on the fibre. By Nadler and Tietze. Feb 9, 1940. In German. 1.50

12579 - 12589 PB L 70340 — Anthrimide dyes. By Wieners. Apr 17, 1941. In German. 1.50

12590 - 12597 PB L 70340 — Monophthaloylcarbazoles and their derivatives. By Wieners. Feb 28, 1941. In German. 1.50

12598 - 12602 PB L 70340 — Phthaloylcarbazoles, experiences and new working methods during their production. By Wieners. Feb 26, 1941. In German. 1.50

12603 - 12606 PB L 70340 — Acylamino-anthraquinones with diphenylenoxide-3-carboxylic acid chloride. By Bienert. Mar 7, 1941. In German. 1.50

12607 - 12611 PB L 70340 — 3,4-Phthaloyl-6-chlorine-carbazole-1-carboxylic acid and dyes derived from it. By Kramer. Apr 15, 1941. In German. 1.50

12612 - 12615 PB L 70340 — Verification of the American patent 2 214 970 (Du Pont). By Gassner. Apr 5, 1941. In German. 1.50

12616 - 12619 PB L 70340 — Acid wool dyes with 1-amino-2-methyl-5,6,7,8,-tetrahydronaphthalene. By Weinand. Apr 16, 1941. In German. 1.50

12620 - 12624 PB L 70340 — Acid wool dyes on a 1,4 dihexahydroanilido-anthraquinone basis. By Weinand. Apr 15, 1941. In German. 1.50

12625 - 12628 PB L 70340 — Green wool dyes in the oxazole series. By Berliner. Feb 14, 1941. In German. 1.50

12629 - 12634 PB L 70340 — New azine synthesis in the anthraquinone series. By Kramer. Apr 15, 1941. In German. 1.50

12635 - 12641 PB L 70340 — Phthalocyanine dyes. By Bienert. Feb 20, 1941. In German. 1.50

12642 - 12656 PB L 70340 — Tinctorial properties of "Siriuslichtgrün EFGL". By Bienert. Mar 31, 1941. In German. 1.50

12657 - 12667 PB L 70340 — Verification of the British patents 516342, 517360, 519064, Bis-m-indolethione, di-(methylmercapto)bis-iso-indolenylidenes and derived dyes. By Bienert. Mar 18, 1941. In German. 1.50

12668 - 12671 PB L 70340 — Nitration of 1,1'-dianthraquinonylamine. By Gassner. Apr 4, 1941. In German. 1.50

12672 - 12675 PB L 70340 — Desensitizers in the anthraquinone series. By Gassner. Apr 3, 1941. In German. 1.50

12676 - 12679 PB L 70340 — Technical method for the production of anthranyl-9-mercaptan. By Berliner. Mar 25, 1941. In German. 1.50

12680 - 12695 PB L 70340 — Production of saccharine without toluene and without permanganate. By Bienert. Jun 5, 1940. In German. 2.00

12696 - 12698 PB L 70340 — Improved Widmer - top. By Bienert. Mar 7, 1941. In German. 1.50

12699 - 12701 PB L 70340 — Glass pumps for laboratory use. By Raab and Becker. Apr 4, 1941. In German. 1.50

12702 - 12703 PB L 70340 — 1,4-diamino anthraquinons from 1-amino-anthraquinone-2-sulfonic acid. By Weinand. May 8,1942. In German. 1.50

12704 - 12705 PB L 70340 — N-substituted saccharines. By Baehr. May 9, 1942. In German. 1.50

12706 - 12707 PB L 70340 — Experiences during the preparation of anthranyl-9-mercaptan. By Berliner. May 6, 1942. In German. 1.50

12708 - 12711 PB L 70340 — Dyeing of triacetyl cellulose with cellitone dyes and cellitone-fast dyes. By Hopff. May 17, 1943. In German. 1.50

12712 - 12717 PB L 70340 — Finely pulverized types of vat dyes for dyeing and printing. By Efflaender. Oct 19, 1933. In German. 1.50

12718 - 12724 PB L 70340 — Production of naphthalic acid anhydride. By Mueller. Jul 7. 1934. In German. 1.50

12725 - 12727 PB L 70340 — 6-Bz-1-dibromobenzanthrone. By Wolff. Jun 7, 1934. In German. 1.50

12728 - 12737 PB L 70340 — Effect of ammonium and amines on 1,2-chrysenequinones. By Neresheimer and Zell. Jun 15, 1934. In German. 1.50

12738 - 12746 PB L 70340 — Phthaloyl acenaphthenes. By Neresheimer. and Ruppel. Jun 18, 1934. In German. 1.50

12747 - 12759 PB L 70340 — Phthaloyl fluorenes and derived dyes. By Nawiasky and Robl. Jun 14, 1934. In German. 1.50

12760 - 12763 PB L 70340 — Benzanthrene self-condensation product ("Fluorol OV"). By Wulff. Jun 14, 1934. In German. 1.50

12764 - 12772 PB L 70340 — Improvement of the constancy of the solution of "Indanthrenblau RS". By Palm. Jun 14, 1934. In German. 1.50

12773 - 12777 PB L 70340 — Process for carrying out alcoholic potassium hydroxide fusions. By Haag and Reindel. Jun 11, 1934. In German. 1.50

12778 - 12796 PB L 70340 — Chromatographic adsorption analysis. By Hengstenberg and Ebel. Feb 8, 1934. In German. 2.00

12797 - 12821 PB L 70340 — Research in the 1,9-anthrapyrimidine series. By Kunz and others. Jun 11, 1934. In German. 2.50

12822 - 12823 PB L 70340 — Preparation of isoviolanthrene from benzanthrone or 2,2'-dibenzanthronyl according to U.S. patent 1,921,496. By Bluemmel. May 18, 1934. In German. 1.50

12824 - 12825 PB L 70340 — Preparation of isoviolanthrene from Bz-1-halide of benzanthrone according to U.S. patent 1,947,858. By Bluemmel. May 18, 1934. In German. 1.50

12826 - 12828 PB L 70340 — Preparation of a vat dye from dichloroisodibenzanthrone with anthranilic acid or its esters according to Japanese patent application Nr. 5413/33. By Krauch. May 28, 1934. In German. 1.50

12829 - 12836 PB L 70340 — 2-Mercapto-3-amino-anthraquinone and 1-amino-2-anthraquinonyl-2-3',anthraquinone thiazole (vat dyes). By Stein and Berthold. Jul 16, 1934. In German. 1.50

12837 - 12840 PB L 70340 — Hydrogenated pyrenes. By Neresheimer and Schneider. Jul 16, 1934. In German. 1.50

12841 - 12846 PB L 70340 — Chlorination of anthraquinone monocarboxylic acids and anthraquinone monosulfonic acids (patent application I 47200). By Jul Mueller. Oct 19, 1934. In German. 1.50

12847 - 12851 PB L 70340 — Alkoxy-amino-anthraquinones and alkoxy-dihydroxy-anthraquinones from the corresponding sulfonic acids. By Jul. Mueller. Oct 26, 1934. In German. 1.50

12852 - 12858 PB L 70340 — 1-Amino anthraquinone-2-carboxylic acid chloride. By Stein. Nov 1, 1934. In German. 1.50

12859 - 12869 PB L 70340 — Phthaloyl - indan. By Robl. Nov 5, 1934. In German. 1.50

12870 - 12877 PB L 70340 — Nitro-and amino-derivatives of hexahydropyrene. By Neresheimer and Held. Nov 7, 1934. In German. 1.50

12878 - 12885 PB L 70340 — Vat dyes of the 1,2-chrysene quinone series. By Neresheimer and Zell. Nov 2, 1934. In German. 1.50

12886 - 12906 PB L 70340 — Acylamines in the 1,9-anthrapyrimidine series. By Kunz and others. Oct 21, 1934. In German. 2.50

12907 - 12913 PB L 70340 — Imides in the 1,9-anthrapyrimidine series. By Koberle and Schlichting. Nov 1, 1934. In German. 1.50

12914 - 12921 PB L 70340 — Indigo sols of the anthrapyrimidine series. By Koberle and Munster. Oct 22, 1934. In German. 1.50

12922 - 12944 PB L 70340 — Vat dyes from azabenzanthrones. By Kunz and others. Oct 24, 1934. In German. 2.50

12945 - 12958 PB L 70340 — Secondary mixed substituted 1,4 diamino anthraquinones. By Koberle and Steigerwald. Oct 23, 1934. In German. 1.50

12959 - 12963 PB L 70340 — Anthraquinone pyridine compounds. By Kunz and others. Oct 29, 1934. In German. 1.50

12964 - 12973 PB L 70340 — 9,10-benzo-phenanthrene (triphenylene) and its derivatives. By Schuster and Broich. Nov 2, 1934. In German. 1.50

12974 - 12979 PB L 70340 — Violet dyes of the perylene series, resistant to water drops. By Bildmael. Oct 26, 1934. In German. 1.50

12980 - 12994 PB L 70340 — Azoles in the anthraquinone series. By Berthold. Nov 1, 1934. In German. 1.50

12995 - 13000 PB L 70340 — Green wool dyes from 1,4-dichloro-anthraquinone-carboxylic acids. By Stein and Kühne. Mar 21, 1935. In German. 1.50

13001 - 13007 PB L 70340 — Alizarine-"Rubinols" with carboxylic amide and carboxylic ester groups. By Stein. Mar 20, 1935. In German. 1.50

13008 - 13012 PB L 70340 — Mono- and dicarboxylic acids from aromatic carbohydrates and urea chloride. By Hopff and Ohlinger. Mar 15, 1935. In German. 1.50

13013 - 13015 PB L 70340 — Behavior of "Cellitonechtblau FFR" during printing. By Köberle and Steigerwald. Mar 9, 1935. In German. 1.50

13016 - 13019 PB L 70340 — New production method for "Cellitonechtblau B"and"BR". By Köberle and Steigerwald. Mar 7, 1935. In German. 1.50

13020 - 13028 PB L 70340 — Dyes in the pyrazino-anthraquinone series. By Neresheimer and Ruppel. Mar 20, 1935. In German. 1.50

13029 - 13040 PB L 70340 — New synthesis of anthraquinone-azines. By Neresheimer. Mar 22, 1935. In German. 1.50

13041 - 13047 PB L 70340 — Vat dyes in the aryl triazine series. By Köberle and Steigerwald. Mar 7, 1935. In German. 1.50

13048 - 13051 PB L 70340 — Anthraquinones with basic side chains. By Kochendörfer. Mar 20, 1935. In German. 1.50

13052 - 13062 PB L 70340 — Triazole-anthraquinone dyes. By Ebel. Mar 22, 1935. In German. 1.50

13063 - 13070 PB L 70340 — Condensation of 1-amino-anthraquinone-2-aldehyde with pyrazolones. By Eichholz. Mar 13, 1935. In German. 1.50

13071 - 13077 PB L 70340 — New method for producing derivatives of the anthraquinone acridone series. By Marxiasky. Feb 28, 1935. In German. 1.50

13078 - 13090 PB L 70340 — New azabenzanthrones and their dye derivatives. By Köberle, and others. Mar 18, 1935. In German. 1.50

13091 - 13112 PB L 70340 — New anthrapyrimidine derivatives. By Schlichting. Mar 25, 1935. In German. 2.50

13113 - 13119 PB L 70340 — New condensation products from dihydroxy-dibenzanthrones. By Bruck. Mar 20, 1935. In German. 1.50

13120 - 13132 PB L 70340 — New dyes from dihydroxy-dibenzanthrones. By Neresheimer and Vislmeier. Mar 7, 1935. In German. 1.50

13133 - 13140 PB L 70340 — Phthaloyl - indan. By Mobl. Jan 21, 1935. In German. 1.50

13141 - 13147 PB L 70340 — Diphthaloyl-perylene. By Grosskinsky. Mar 20, 1935. In German. 1.50

13148 - 13157 PB L 70340 — Recent research on indogosols. By Köberle and Münster. Mar 19, 1935. In German. 1.50

13158 - 13160 PB L 70340 — 1-chloro-anthraquinone-2-carboxylic acid from the nitro compound. By Nawiasky and Saftien. Aug 5, 1935. In German. 1.50

13161 - 13165 PB L 70340 — Poly-chlorination products from 2-methyl anthraquinone. By Jul. Müller. Sep 10, 1935. In German. 1.50

13166 - 13186 PB L 70340 — Quinone syntheses with acroleins. By Kochendörfer. Oct 14, 1935. In German. 2.50

13187 - 13199 PB L 70340 — Secondary, mixed substituted 1,4-diamino-anthraquinones. By Köberle and Steigerwald. Oct 16, 1935. In German. 1.50

13200 - 13204 PB L 70340 — Stable leuco compounds of the leucamine and leuco quinizarine types. By Steigerwald. Oct 16, 1935. In German. 1.50

13205 - 13213 PB L 70340 — Dyes with alkoxylamino and alkoxylimino groups. By Neresheimer and Held. Oct 14, 1935. In German. 1.50

13214 - 13218 PB L 70340 — Acid wool dyes from 1,4,diamino-2,3 dichloro-anthraquinone. By Stein. Sep 25, 1935. In German. 1.50

13219 - 13224 PB L 70340 — Constitution of the amino-anthrapyrimidine-sulfonic acid from formamide and 1,5-diamino-anthraquinone-2-sulfonic acid. By Köberle and Schlichting. Oct 17, 1935. In German. 1.50

PB L 70340-S. I.G. FARBENINDUSTRIE A.G. Research on dyes and dye intermediates. (FIAT Microfilm Reel C-11, Frames 12173-13224, abstract cards). 1933-1942. 128 p. Price: Microfilm-$3.00 - Photostat-$9.00.
These are short abstracts of the reports on reel C 11 (PB 70340) listed above. They were prepared by FIAT abstracters in Germany. In English.

PB L 73719. I.G. FARBENINDUSTRIE A.G., HÖCHST, GERMANY. Prescriptions for dyestuffs and intermediates. (FIAT Microfilm Reel A 38, Frames 2024 - 2681). 1926-1939. 658 f. Price: Microfilm-$6.00 - Enlargement Print-$66.00.
115 individual items are listed below and will be available as enlargement prints only. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
2024 - 2031 PB L 73719	3-Nitro-N-ethylcarbazole (nitro-ethylimide base, "nitrazol"). By Marschall. Nov 10, 1933, May 9, 1934, Aug 17, 1936, Jan 3, 1938. In German.	$1.50
2032 - 2037 PB L 73719	Directions from Leverkusen for 1, 8-chloronaphthalene thioglycolic acid (naphthiolic acid). By Hoffmann. Feb 12, 1935. In German.	1.50
2038 - 2039 PB L 73719	Fluorene dye. Nitro fluorenes. Sep 26, 1933. In German.	1.50

2040 - 2045 PB L 73719 "Orthamin" (o-phenylene diamine). By Marschal and Tampke. Apr 27, 1939, Feb 13, 1934, Feb 16, 1934. In German. 1.50

2046 - 2051 PB L 73719 Hydroxythionaphthene carboxylic acid. By Marschall and W. Mueller. Oct 24, 1930, Mar 6, 1935, Aug 13, 1936. In German. 1.50

2052 - 2053 PB L 73719 Oxazine intermediate product P. By Ochwat and Thiele. May 12, 1935, Aug 12, 1936. In German. 1.50

2054 - 2055 PB L 73719 Oxazine intermediate product S. By Ebert. Nov 10, 1933. In German. 1.50

2056 - 2057 PB L 73719 Preparation of 3-hydroxy-quinophthalone in the Werner-Pfleiderer. By Sieber. Nov 10, 1933. In German. 1.50

2058 PB L 73719 Directions for the isolation of hydroxythionaphthene carboxylic acid from a sodium hydroxide fusion. By Diefenbach. Feb 2, 1938. In German. 1.50

2059 - 2067 PB L 73719 Palatine Fast Pink P 115. By P. Hoffmann. Jan 26, 1939. In German. 1.50

2068 - 2072 PB L 73719 N-Ethyl-2- sulfoethylamino-m-phenol. By P. Hofmann. Jan 21, 1939. In German. 1.50

2073 - 2085 PB L 73719 4-Chloro-o-toluidine, ("parasalz"). By Marschall. Aug 6, 1927. In German. 1.50

2086 - 2094 PB L 73719 "Pentanthrimid". By Ebert. Sep 11, 1929, Sep 25, 1930. In German. 1.50

2095 - 2096 PB L 73719 Pigment Fast Violet-Base. By Thiele. Jan 13, 1938. In German. 1.50

2097 PB L 73719 Pigment Fast Violet R Base. By Ebert. Jul 24, 1937. In German. 1.50

2098 - 2099 PB L 73719 Pigment Fast Violet R. By Marschall. Nov 2, 1933. In German. 1.50

2100 - 2101 PB L 73719 Intermediate products for Pigment Violet. By Thiele. Feb 12, and 13, 1930. In German. 1.50

2102 - 2103 PB L 73719 Pigment Fast Violet R Base. By Ebert. Nov 10, 1933. In German. 1.50

2104 - 2110 PB L 73719 Pyrazole anthrone. By Sch. Jul 8, 1936. In German. 1.50

2111 - 2112 PB L 73719 Pyrenite 3. By Ebert. Jul 24, 1937. In German. 1.50

2113 - 2114 PB L 73719 Pyroxazine. By Ebert. Jul 2, 1937. In German. 1.50

2115 - 2116 PB L 73719 Chlorosulfanil for Sirius Supra Blue FFBL. By Thiess. Nov 22, 1937. In German. 1.50

2117 - 2121 PB L 73719 Blue 3R intermediate product. Apr 24, 1933. In German. 1.50

2122 - 2123 PB L 73719 Sirius Supra Blue FFGL. By Hesse and Thiele. May 29, 1933, Aug 11, 1936. In German. 1.50

2124 PB L 73719 Sirius Supra Blue FFRL. By Hesse. Aug 11, 1936. In German. 1.50

2125 - 2128, 2130 PB L 73719 Filtration tests with Sirius Supra Blue FFRL. By G. Schaefer. n. d. In German. 1.50

2129 PB L 73719 This frame is missing.

2131 - 2141 PB L 73719 Sirius Supra Blue FFRL. By Thiele. Mar 8, 1935, Mar 6, May 19, 1936. In German. 1.50

2142 - 2143 PB L 73719 Sirius Supra Blue F3GL, F material. By Ebert, and Schultheiss. Oct 8, 1935, Jul 2, 1937. In German. 1.50

2144 - 2150 PB L 73719 Apparatus for Sirius dyes. Sep 18, 25, 1933. In German. 1.50

2151 - 2154 PB L 73719 Sirius Supra Blue FF2GL. By Klemme and Popp. Dec 20, 1937, Mar 28, 1938. In German. 1.50

2155 - 2157 PB L 73719 Sirius Supra Violet 5B704. By Maennchen. Sep 23-24, 1935. In German. 1.50

2158 - 2171 PB L 73719 Sirius Supra Violet FFR. By Langbein. Jul 2, 1935, Nov 26 and Dec 7, 1936, Dec 5, 1936, Sep 3, 1937. In German. 1.50

2172 PB L 73719 m-Chlorotoluene sulfonylchlorides. By R.K. Müller. Jan 7, 1935. In German. 1.50

2173 - 2175 PB L 73719 Supra Light Yellow GGL. (Direction from Ludwigshafen). Apr 14, 1938. In German. 1.50
Not very legible.

2176 - 2195 PB L 73719 Supra Light Yellow GGL. (Directions from Hoechst). By Tampke and others. May 27, 1936, Dec 21, 1936, Mar 9, 1937, Oct 15, 1937. In German. 2.00

2196 - 2199 PB L 73719 Supramine Blue P 103. By Zahn. Sep 24, 1934. In German. 1.50

2200 PB L 73719 Terephthalyl chloride. Oct 3, 1932. In German. 1.50

2201 - 2005 PB L 73719 1.4.5.8-Naphthalene tetracarboxylic acid retesting of the method of Ludwigshafen. By Greune and Langbein. Jul 16, 1935. In German. 1.50

2206 - 2213 PB L 73719 1.4.5.8-Naphthalene tetracarboxylic acid. By Tampke and Sieber. Nov 2, 1931, Feb 5, 1935. In German. 1.50

2214 - 2221 PB L 73719 1.4.5.8-Naphthalene tetracarboxylic acid. By Greune. Nov 6, 1930, Sep 8, 1931. In German. 1.50

2222 - 2223 PB L 73719 1.4.5.8-Naphthalene tetracarboxylic acid. By Greune. Mar 25, 1930. In German. 1.50

2224 - 2225 PB L 73719 1.4.5.8-Naphthalene tetracarboxylic acid. By Sieber and Braunsdorf. Mar 13 and 25, 1930. In German. 1.50

2226 - 2236 PB L 73719 5-Chloro-tolyl-3-thioglycolic acid (thio-3B-acid). By R.K.Mueller, and Marschall. Aug 20, 1934, Jun 22, Aug 18-19, 1937. In German. 1.50

Dyes (contd)

2237 - 2240 PB L 73719 "Transketon". By Osterloh. Nov 12, 1938. In German. 1.50

2241 - 2242 PB L 73719 "1,5-Trianthrimid". By Osterloh. Oct 9, 1937. In German. 1.50

2243 - 2246 PB L 73719 Wool Vat Green. Aug 28, 1935. In German. 1.50

2247 PB L 73719 Zapon Fast Violet CRR. By R.K.Mueller. May 29, 1935. In German. 1.50

2248 - 2249 PB L 73719 Indanthrene Brown RRD. By Hofmann. Oct 11, 1933, Feb 13, 1934. In German. 1.50

2250 PB L 73719 Production of dyes at the G.A.W. in the United States. By Tampke. Feb 16, 1934. In German. 1.50

2251 PB L 73719 See frames No. 2248 - 2249.

2252 - 2253 PB L 73719 Indanthrene Brown RRD Suprafix powder. By Tampke and Winnacker. May 20, 1935. In German. 1.50

2254 - 2255 PB L 73719 Indanthrene Brown RRD. Jul 23, 1936. In German. 1.50

2256 - 2262 PB L 73719 Indanthrene Brown RRA. Jul 15, 1936. In German. 1.50

2263 PB L 73719 Indanthrene Brown RRD fine powder for printing. By Winnacker. Mar 2, 1937. In German. 1.50

2264 - 2265 PB L 73719 Indanthrene Brown RRD. By Hoffmann. May 12, 1936. In German. 1.50

2266 - 2268 PB L 73719 Indanthrene Brown GR. By Hoffmann. Aug 17, 1936. In German. 1.50

2269 - 2273 PB L 73719 Indanthrene Printing Brown B. By Osterloh and Sieber. Nov 10, 1937, Jan 30, 1939. In German. 1.50

2274 - 2275 PB L 73719 Letter to the technical committee, Frankfurt/Main. By Tampke and Eckert. Sep 28, 1933. In German. 1.50

2276 - 2286B PB L 73719 Indanthrene Printing Brown R. By Hoffmann. Sep 26, 1933. In German. 1.50

2287 - 2297 PB L 73719 These frames are missing.

2298 - 2305 PB L 73719 Indanthrene Printing Brown 3 R Base. By Hoffmann. Jun 26, 1931. In German. 1.50

2306 PB L 73719 Indanthrene Printing Brown TM Suprafix (Hoe). By Eckert. Mar 24, 1933. In German. 1.50

2307 - 2309 PB L 73719 Indanthrene Printing Blue B and B Suprafix. By Thiess and others. Jul 15, 1930, Jul 29, 1935. In German. 1.50

2310 - 2317 PB L 73719 Indanthrene Printing Blue R Base and Paste. By Hoffmann. Sep 21, 1933, Jul 29, 1935. In German. 1.50

2318 - 2331 PB L 73719 Indanthrene Printing Blue 2 G Base, F article, and Suprafix. By Hoffmann. Sep 21, 1933, Jul 29, 1935. In German. 1.50

2332 - 2343 PB L 73719 Indanthrene Brilliant Orange GR, F material, powder fine, Suprafix, Double Paste. By Moldenke and others. Dec 15, 1930, Sep 28, 1933, Mar 4, 1935, Jan 8, 1937- May 18, 1937. In German. 1.50

2344 - 2352 PB L 73719 Indanthrene Printing Black B, Powder and Suprafix. By Tampke and others. Oct 22, 1933, Mar 5, 1935. In German. 1.50

2353 - 2354, 2366 - 2386, 2390 - 2398 PB L 73719 Indanthrene Printing Black BL Base. By Hoffmann. Feb 20, 1935 - Jun 29, 1937. In German. 3.50

2355 - 2365, 2387 - 2389 Indanthrene Printing Black BL Suprafix, (Paste and Powder). By Baehr and Hoffmann. Dec 20, 1934, Feb 12, 1935. In German. 1.50

2399 - 2400 PB L 73719 Indanthrene Printing Black T Suprafix. Oct 27, 1937. In German. 1.50

2401 - 2415, 2657 - 2660 PB L 73719 Indanthrene Yellow 3 R, Paste, Powder, and Fine Powder. By Tampke and Ebert. May 6, 1930 - Jan 8, 1937. In German. 2.00

2416 - 2425, 2661 - 2665 PB L 73719 Indanthrene Yellow FFRK. By Ebert and others. Oct 10, 1930, Jan 14, 1932. In German. 1.50

2426 - 2434, 2649 - 2656 PB L 73719 Indanthrene Yellow 3 RT, Powder, concentrated Powder, superconcentrated Powder, fine Powder. By Ebert. Sep 11, 1929 - Mar 30, 1936. In German. 2.00

2435 - 2437 PB L 73719 Indanthrene Golden Yellow RK Base T and Powder fine. By Osterloh and Winnacker. Sep 12, 1929 - Aug 26, 1937. In German. 1.50

2438 - 2449 PB L 73719 Indanthrene Golden Yellow GK, Base N and MU. By Osterloh and Hilpert. Dec 2, 1932 - Nov 10, 1938. In German. 1.50

2450 - 2454 PB L 73719 Indanthrene Golden Yellow GOW. By Osterloh and Tampke. Feb 14 1934 - Feb 16, 1934. In German. 1.50

2455 PB L 73719 Purification of the dibrombenzanthrone. By Schultheis. Nov 13, 1934. In German. 1.50

2456 - 2470 PB L 73719 Indanthrene Grey M manufactured article, paste, powder, and fine powder. By Tampke and Ebert. Feb 16, 1934, Jan 8, 1937. In German. 1.50

2471 - 2476 PB L 73719 Indanthrene Khaki GG, Paste, Powder, fine Powder, and GGC. By Ebert and Winnacker. Feb 16, 1934 - Jan 8, 1937. In German. 1.50

2477 - 2491 PB L 73719 Indanthrene Navy Blue R, Paste and Powder. By Tampke and Ebert. Jan 9, 1929 - Nov 23, 1934. In German. 1.50

2492 - 2496 PB L 73719 Indanthrene Red Violet RH, Indanthrene Printing Violet RH Paste. By R.K. Mueller and Marschall. Jan 7, 1935 - Jul 13, 1937. In German. 1.50

Dyes (contd)

2497 - 2511 PB L 73719 Indanthrene Scarlet GG, Suprafix and fine Powder. By Tampke and others. Feb 28, 1930 - Sep 8, 1937. In German. 1.50

2512 - 2539 PB L 73719 Indanthrene Scarlet 4 G and fine Powder. By Vollmann and Hesse. Nov 6, 1929 - Jan 8, 1937. In German. 3.00

2540 - 2545 PB L 73719 Indanthrene Turquoise Blue GK (=Indanthrene Blue 5 GK and Vat Blue 116). By Eckert and Sieber. Oct 15, 1934. In German. 1.50

2546 - 2547 PB L 73719 Standardization directions for Indigosol O, Indigosol O Extra, Indigosol O4B. By Besler. May 8, 1935. In German. 1.50

2548 PB L 73719 Indigosol O4B. By Besler. Apr 3, 1935. In German. 1.50

2549 - 2556 PB L 73719 Indigosol Blue IBC and Indigosol Blue IBC Paste. By Moldaenke and others. Jul 30, 1934 - Jan 3, 1938. In German. 1.50

2557 - 2567 PB L 73719 Indigosol Brilliant Orange IRK. By Bollweg and Holz. Oct 30, 1936 - May 25, 1937. In German. 1.50
Frames 2563-2567 illegible.

2568 - 2571 PB L 73719 Indigosol Grey 71a A Powder Le. By Bollweg and Zeh. Mar 12, 1935. In German. 1.50
Partly illegible.

2572 - 2576 PB L 73719 Indigosol Pyrene Green (Indigosol Green I3G). By Besler and Vollmann. Mar 12, 1934 - Mar 28, 1938. In German. 1.50

2577 PB L 73719 Indigosol Orange IOG. By Bollweg. May 2, 1938. In German. 1.50

2578 - 2585 PB L 73719 Indigosol Red IFBB, Powder, Paste 16.6 % tetraester, and Paste 8.9 % triester. By Muenster and Besler. Jun 27, 1935 - Jan 11, 1937. In German. 1.50

2586 - 2587 PB L 73719 Indigosol Scarlet I4G. By Tampke and Besler. May 9, 1934 - Mar 17, 1935. In German. 1.50

2588 - 2592 PB L 73719 Analysis of Isatin GX. By R.K. Mueller. Jun 14, 1937. In German. 1.50

2593 - 2599 PB L 73719 Isatin anilide. Apr 11, 1933. In German. 1.50

2600 - 2601 PB L 73719 "Isonitroso for Brown". By Hesse. Aug 17, 1936. In German. 1.50

2602 PB L 73719 Pasting of the Alizarin Indigo dyes. Jan 7, 1937. In German. 1.50

2603 - 2604 PB L 73719 Alizarin Indigo 7 R Base (5,7-dichloroindole-2-2-p-chloronaphthalene indigo). Dec 20, 1926 In German. 1.50

2605 PB L 73719 Alizarin Indigo Grey M Base. (Dibromo-2-,1-naphthindole-2=2-p-chloronaphthalene indigo). Jan 6, 1927. In German. 1.50

2606 - 2607 PB L 73719 Alizarin Indigo Green B Base (1-chloro (bromo) nitro-2,3-naphthindole-2=2-p-chloro-anthracene indigo). Jan 6, 1927. In German. 1.50

2608 PB L 73719 Alizarin Indigo Red B Base (6,5',7'-trichloro-2=3'-bisindole indigo). Feb 1, 1926. In German. 1.50

2609 - 2610 PB L 73719 Alizarin Indigo Violet B Base. (6,5',7'-thichloro-2=2 -bisindole indigo). Jan 3, 1927. In German. 1.50

2611 - 2615 PB L 73719 Alizarin Brown ordinary, HD and powder. By Kronholz. Jun 24, 1929. In German. 1.50

2616 - 2617 PB L 73719 Alizarin Indigo 3 R Base. (5,7-dibromoindole-2=2-p-bromonaphthalene indigo). Dec 30, 1926. In German. 1.50

2618 - 2620 PB L 73719 Alizarin Indigo 7 G Base. (1-chloro-2,3-naphthindole-2=2-α-anthracene indigo). Dec 27, 1926. In German. 1.50

2621 - 2622 PB L 73719 Alizarin Indigo 5 R Base (5,7-dibromoindole-2=2-p-chloronaphthalene indigo). Dec 30, 1926. In German. 1.50

2623 - 2625 PB L 73719 Alizarin Indigo 3 R Crude Base (5,7-dibromoindole-2=2-α-naphthalene indigo). Dec 28, 1926. In German. 1.50

2626 - 2630 PB L 73719 Alizarin Indigo G Base. (5,7-dibromo-(2)-indole-2-α-anthracene indigo). Dec 22, 1926. In German. 1.50

2631 - 2632 PB L 73719 Alizarin Indigo Black B Base (2,3-naphthindole -2=2 - p-chloroanthracene indigo). Jan 3, 1927. In German. 1.50

2633 - 2634 PB L 73719 5,7-Dibromoisatin. Dec 9, 1939. In German. 1.50

2635 - 2642 PB L 73719 Indigo Brown BRD (Symmetrical thioindigo of 2,1-naphthohydroxy-thiophene). By R.Ebert. Nov 12, 1929. In German. 1.50

2643 - 2645 PB L 73719 Standardization of Indanthrene Printing Brown R and Algol Brown RN. By Ebert. May 17, 1929. In German. 1.50

2646 - 2648 PB L 73719 Indanthrene Printing Brown RF. By Ebert. Sep 26, 1929. In German. 1.50

2649 - 2656 PB L 73719 See frames 2426 - 2434.

2657 - 2660 PB L 73719 See frames 2402 - 2415.

2661 - 2665 PB L 73719 See frames 2416 - 2425.

2666 - 2674 PB L 73719 Experiences gained with the rapid melting method in the ring closure of 1,4- and 1,6-diarylnaphthalenes. By Vollmann. May 6, 1929. In German. 1.50

2675 - 2680 PB L 73719 Indanthrene Yellow RK. By R. Ebert. Sep 12, 1929. In German. 1.50

2681 PB L 73719 Vat Golden Orange 20499 (Hö). By Corell. Nov 27, 1928. In German. 1.50

PB L 73719-S. I.G. FARBENINDUSTRIE A.G. HÖCHST, GERMANY. Prescriptions for dyestuffs and intermediates. (FIAT Microfilm Reel A 38, Frames 2024-2681, abstract cards). 1926 - 1939. 141 p. Price: Microfilm $3.00 - Photostat $10.00.
These are abstract cards of the items on reel A 38 (PB73719) described above. They were prepared by FIAT abstractors in Germany.

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PB L 85650. BUNA WERKE G.M.B.H., SCHKOPAU, GERMANY, and I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY.
Mersasinsulfonat, an emulsifier for Igelit PCU. Jan 1943. 147 p. Price: Microfilm-$4.50 - Photostat-$15.00
Folder contains collection of material on planned production of the emulsifier, a sulfochlorination product of hydrogenated straight-chain paraffin hydrocarbons containing 13 to 16 carbon atoms. In German with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field Dayton, Ohio.

* PB L 87364. CURTIS, R. G. and others. "Igamil" aniline - formaldehyde resin. (BIOS Final Rept 1582, Item 22). Sep 1947. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00
Resins made by the action of formaldehyde on aniline have been mentioned in earlier reports, CIOS XXIX-62, p. 90 (PB 949; v. 1, p. 350 of the Bibliography), BIOS 861, p. 348 (PB 78649, v. 6, p. 946), and BIOS 1065, pp. 131-134 (PB 75872, v. 7, p. 573), but only the last mentioned gives a description of the process. The present report amplifies the details published previously. I. G. Farben has not made more than the slightest changes to the process acquired from the Ciba Company of Switzerland, and virtually only one type of resin was made. Aniline-formaldehyde resin is not versatile and in Germany it was used without filler as moulding powder, or with a cellulosic filler as moulding powder or when sheeted, as laminating paper. Electrical applications formed the prime outlet, but during the war period uses were extended because of the shortage of phenol.

PB L 70416. I.G. FARBENINDUSTRIE, A.G., BOBINGEN, GERMANY. Synthetic fibers. (FIAT Microfilm Reel M 13, Frames 1-821). 1940-1944. 821 f. Price: Microfilm-$6.00 - Enlargement Print-$82.50
This microfilm reel was prepared by FIAT in Germany. 62 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel.
In German.

Frames.	Title	Price
1-50 PB L 70416	Cellulose fiber, rayon. By Stein ? Sep 8, 1942. In German.	$5.00
51-53 PB L 70416	Hardness tester for rubber. By Schopper. n.d. In German.	1.50
54-70 PB L 70416	Yarn strength tester. By Schopper. n.d. In German.	2.00
71-85 PB L 70416	Machine for testing the abrasion of fabrics, cloth, etc. By Schopper. n.d. In German.	1.50
86-95 PB L 70416	Bursting strain tester. By Schopper. n.d. In German.	1.50
96-101 PB L. 70416	Rapid lanometer. By Schopper. n.d. In German.	1.50
102-115 PB L 70416	Instrument for testing the air-permeability of fabrics. By Schopper. n.d. In German.	1.50
116-382 PB L 70416	Testing of fibers. n.d. In German.	27.00
383-442 PB L 70416	Testing the standard fabric. Jan 15, 1940. In German.	6.00
443-444 PB L 70416	Polyamides. By Kleine. Aug 7, 1943. In German.	1.50
445-459 PB L 70416	Polyamides. Report of a conference on October 30, 1942. n.d. In German.	1.50
460-465 PB L 70416	Polyamides. Ribbon spinning process. n.d. In German.	1.50
466-468 PB L 70416	Polyurethanes. By Ludwig. Jun 21, 1943. In German.	1.50
469-471 PB L 70416	Polyurethanes. By Wenger. Nov 5, 1942. In German.	1.50
472 PB L 70416	"Perlon" fiber. By Schleck. Oct 27, 1942. In German.	1.50
473-474 PB L 70416	"Perlon", analysis. By Wenger. Jan 17, 1941. In German.	1.50
475-478 PB L 70416	Polyamides, Viscosity. By Kleinschrodt. Jul 21, 1941. In German.	1.50
479-496 PB L 70416	"Perlon, Tests. Dec 30, 1943. In German.	3.00
497-505 PB L 70416	Polyamides, Starting materials. By Bayer. Oct 26, 1942. In German.	1.50
506 PB L 70416	Formulae for "Cantanole", "Tanigane", "Setanol". Oct 23, 1943. In German.	1.50
507-508 PB L 70416	Treatment of "Perlon". By Spencker. Jul 16, 1942. In German.	1.50
509-569 PB L 70416	Mixtures of cellulose fiber and "Perlon". By Schiele. Nov 20, 1944. In German.	6.50
570-577 PB L 70416	"Perlon", Report of a meeting. By Spencker. Dec 12, 1944. In German.	1.50
578-592 PB L 70416	Treatment of "Perlon" fibers. By Schiele. May 10, 1944. In German.	1.50
593-600 PB L 70416	Conference on "Perlon". By Spencker. Apr 21, 1944. In German.	1.50
601-616 PB L 70416	"Perlon", Fiber processing. By Schiele. Jul 9, 1943. In German.	2.00
617-633 PB L 70416	Processing of "Perlon", Report of a conference. By Schiele. May 26, 1943. In German.	2.00
634-641 PB L 70416	Cellulose fiber, rayon. Patent application ? 57 754, dated Jul 25, 1942. In German.	1.50
642-646 PB L 70416	ZELLWOLLE UND KUNSTSEIDE-RING, BERLIN. Polyamides. Patent application ? 27 426, dated Oct 29, 1942. In German.	1.50
647-649 PB L 70416	ZELLWOLLE UND KUNSTSEIDE-RING, BERLIN. Polyamides. Patent application ? 27 480, dated Nov 20, 1942. In German.	1.50
650-651 PB L 70416	Carbon disulfide. Draft of patent application, dated Jul 13, 1944. In German.	1.50
652-653 PB L 70416	MEDIGER and HARTMUTH (Inventors). Cellulose fiber, rayon. Patent application J 73 007, dated Aug 22, 1942. In German.	1.50
654-656 PB L 70416	Treatment of polyamides. Patent application J 72 767, dated Jul 18, 1942. In German.	1.50

669-678 PB L 70416 — Improvement of polyamide fibers. Patent application J 72 756, dated Jul 17, 1942. In German. 2.00

679-687 PB L 70416 — MEDIGER and HARTMUTH (Inventors). Polyamide. Diaphragms. Patent application J 71 176, dated Dec 19, 1941. Addition to patent J 70 652. In German. 1.50

688-689 PB L 70416 — "Perlon". Production. Recovery of caprolactam. By Krumhin. Dec 23, 1943. In German. 1.50

690-695 PB L 70416 — Polyamides. Polymerization of caprolactam. By Krumhin. Nov 16, 1943. In German. 1.50

696-700 PB L 70416 — Tanning materials. By Müller. Nov 10, 1943. In German. 1.50

701-705 PB L 70416 — Polyamides. Meeting report. By Spencker. Dec 6, 1943. In German. 1.50

706-707 PB L 70416 — "Perlon". Recovery of lactams. By Müller. Dec 10, 1943. In German. 1.50

708-709 PB L 70416 — Decomposition of "Perlon". By Krumhin. Dec 1, 1943. In German. 1.50

710-712 PB L 70416 — Polyamides. Comparative tests with "Isamides". By Spencker. Nov 30, 1943. In German. 1.50

713-718 PB L 70416 — Polymerization products. By Sauer. Nov 24, 1943. In German. 1.50

719-720 PB L 70416 — Sulfone tanning agents. By Spencker. Nov 20, 1943. In German. 1.50

721 PB L 70416 — Lacquering of "Perlon" fibers. By Spencker. Nov 16, 1943. In German. 1.50

722-723 PB L 70416 — Polyurethane. By Spencker. Nov 12, 1943. In German. 1.50

724-728 PB L 70416 — Sulfone tanning agents. By Müller. Nov 11, 1943. In German. 1.50

729-741 PB L 70416 — Polymerization of "Perlon". By Sauer. Oct 22, 1943. In German. 1.50

742-744 PB L 70416 — "Perlon" fiber for pneumatic boats. By Schiele. Oct 21, 1943. In German. 1.50

745-748 PB L 70416 — "Perlon" fiber production. By Oswald. Oct 20, 1943. In German. 1.50

749-750 PB L 70416 — Lacquering "Perlon" fiber. By Spencker. Oct 16, 1943. In German. 1.50

751-752 PB L 70416 — "Perlon". Polymerization of caprolactam. By Krumhin. Oct 9, 1943. In German. 1.50

753-754 PB L 70416 — Discoloration of "Perlon" fiber. By Ko. Sep 22, 1943. In German. 1.50

755-756 PB L 70416 — Recovery of monolactam. By Müller. Sep 22, 1943. In German. 1.50

757-762 PB L 70416 — Polymerization of "Perlon". By Sauer. Sep 21, 1943. In German. 1.50

763-775 PB L 70416 — "Perlon" fiber production. By Müller. Aug 25, 1943. In German. 1.50

776-781 PB L 70416 — Stability of perlon fiber to light. Aug 21, 1943. In German. 1.50

782 PB L 70416 — Perlon fiber. Detection of caprolactam. By Krumhin. Aug 21, 1943. In German. 1.50

783-784 PB L 70416 — Polyamides. Numerical nomenclature. By Schlack. Aug 13, 1943. In German. 1.50

785-793 PB L 70416 — Polyamides. Spinning tests. By Oswald. Jul 31, 1943. In German. 1.50

794-815 PB L 70416 — "Perlon". Observation of the polymerization process. By Sauer. Jul 14, 1943. In German. 1.50

816-821 PB L 70416 — Production of polyurethane. By Spencker. Aug 27, 1943. In German. 1.50

PB L 70416-S. I.G. FARBENINDUSTRIE A.G., BOBINGEN, GERMANY. Synthetic fibers. (FIAT Microfilm Reel M 13, Frames 1-821, abstract cards). 1940-1944. 62 p. Price: Microfilm-$2.00 - Photostat-$5.00
These are abstracts cards of the items on the above FIAT microfilm reel, M 13, PB 70416, prepared by FIAT personnel in Germany.

PB L 70174 I.G. FARBENINDUSTRIE A.G., FRANKFURT AM MAIN, GERMANY. Plastics. (FIAT Microfilm Reel ◊ 36, Frames 9227-9999 and 1-26). 1931-1945. 799 f.
Price: Microfilm-$6.00 - Enlargement Print-$80.00
This reel was prepared by FIAT investigators in Germany. 168 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
9227-9233 PB L 70174	Polymerization of chloroprene. By W. Kern. n.d. In German.	$1.50
9234-9246 PB L 70174	New method for production of butadiene. By M. Lange. Apr 12, 1939. In German.	1.50
9247-9250 PB L 70174	Production of butadiene by hydrogenation of monovinyl acetylene. By Nicodemus. Jan 5, 1938. In German.	1.50
9251-9256 PB L 70174	Obtaining esters and aromatic ethers of 2-hydroxy-butadiene-1.3. By Jahn. n.d. In German.	1.50
9257-9265 PB L 70174	Concentration of latex. Jan 24, 1939. In German.	1.50
9266-9268 PB L 70174	Polychloroprene. By Winnacker. Jun 24, 1938. In German.	1.50
9269-9274 PB L 70174	Opinion on the use of "Hostapren" (polychloroprene-Hoechst). May 25, 1938. In German.	1.50
9275-9287 PB L 70174	Emulsion-polymerization explained by a cloroprene sample. By Winnacker. Jan 14, 1938. In German.	1.50
9288-9299a PB L 70174	Weldability of different rubber materials. By Sarring. Jan 9, 1945. In German.	1.50
9300-9302 PB L 70174	Behavior of different types of rubber with regard to solvents. By Sarring. Jan 2, 1945. In German.	1.50
9303-9310 PB L 70174	Determination of end groups and catalyst incorporation into	

polymers. By Kern.
Jul 15, 1943. In German. 1.50

9311-9313 FB L 70174 — Precipitation of chloroprene-latex. By Krieger.
Sep 1, 1944. In German. 1.50

9314-9315 FB L 70174 — Purification of acetylene. By Möller. Jun 5, 1941.
In German. 1.50

9316-9318 FB L 70174 — Development of acetylene gas purification for vinyl acetate. By Kraemer. Nov 5, 1940.
In German. 1.50

9319-9330 FB L 70174 — Vinyl acetate contact-catalysts.
Apr 2, 1940. In German. 1.50

9331-9340 FB L 70174 — Discontinuous bead polymerization of vinyl acetate. By Hahn
Apr 6, 1939. In German. 1.50

9341-9346 FB L 70174 — Storage of vinyl acetate (danger of polymerization). By Persiel.
Jun 15, 1945. In German. 1.50

9347-9352 FB L 70174 — Preparation of vinyl esters according to the Wacker process. By Specketer. Mar 20, 1942.
In German. 1.50

9353-9371 FB L 70174 — Experiments on the preparation of vinyl acetate. By Fuchs.
Jul 29, 1941. In German. 2.00

9372-9373 FB L 70174 — Preparation of vinyl acetate from glycol diacetate. By Fuchs.
Nov 29, 1941. In German. 1.50

9374-9381 FB L 70174 — Further development of the vinyl acetate process. By Himmler.
May 12, 1944. In German. 1.50

9382-9384 FB L 70174 — Treatment of vinyl acetate first runnings. By Himmler.
Sep 1942. In German. 1.50

9385-9386 FB L 70174 — Influence of divinyl acetylene on emulsion polymerization of vinyl acetate. By Monheim.
Aug 27, 1943. In German. 1.50

9387-9390 FB L 70174 — Vinyl acetate mixtures, Analyses.
By Hauke. Jun 22, 1943.
In German. 1.50

9391 FB L 70174 — Covering sheet for experiments with vinyl acetate. n.d.
In German. 1.50

9392 FB L 70174 — Vinyl crotonate in vinyl acetate.
By Monheim. Nov 30, 1942.
In German. 1.50

9393-9394 FB L 70174 — Vinyl acetate. Treatment with bisulfite. Sep 5, 1940.
In German. 1.50

9395 FB L 70174 — Formation of acetic acid anhydride in vinyl acetate distillation.
By Horn. Apr 6, 1940.
In German. 1.50

9396 FB L 70174 — Specific heat of acetic acid vapor at 200° C. By Horn.
Feb 19, 1940. In German. 1.50

9397 FB L 70174 — Influence of acetaldehyde and crotonaldehyde in vinyl acetate on the fuchsine-sulfurous acid test and the spectral number.
By Hauke. Feb 13, 1940.
In German. 1.50

9398-9399 FB L 70174 — Vinyl acetate. By Hauke
Dec 19, 1938. In German. 1.50

9400-9405 FB L 70174 — Preliminary study of the saponification speed of vinyl acetate.
Dec 12, 1938. In German. 1.50

9404-9409 FB L 70174 — Polymerization of "MVi" and activation of vinyl acetate. By Hahn
Oct 10, 1939. In German. 1.50

9410-9413 FB L 70174 — Analytical procedure for vinyl acetate. By Hauke.
Feb 18, 1941. In German. 1.50

9414-9436 FB L 70174 — Polyvinyl acetate. By Hauke
Apr 1941. In German. 2.50

9437-9442 FB L 70174 — Purity test of vinyl acetate by determining the "electric number".
By Horn. Feb 20, 1940.
In German. 1.50

9443-9444 FB 1 70174 — Spectral number of vinyl acetate.
By Fuchs. Mar 24, 1942.
In German. 1.50

9445-9447 FB L 70174 — Spectral number in vinyl acetate.
By Hauke. Aug 25, 1941.
In German. 1.50

9448-9449 FB L 70174 — Determination of spectral number of polymerization products.
By Hauke. Mar 18, 1941.
In German. 1.50

9450-9452 FB L 70174 — Sources of error in the determination of the spectral number of vinyl acetate. By Fuchs.
Mar 14, 1941. In German. 1.50

9453 FB L 70174 — Spectral numbers of diverse products. By Hauke.
Sep 19, 1940. In German. 1.50

9454-9455 FB L 70174 — Vinyl acetate. Treatment with bisulfite. By Hauke.
Sep 5, 1940. In German. 1.50

9456 FB L 70174 — Influence of acetaldehyde and crotonaldehyde in vinyl acetate on the fuchsine-sulfurous acid test and spectral number.
1940. In German. 1.50

9457-9458 FB L 70174 — Influence of acetaldehyde and crotonaldehyde on the ultra-violet absorption spectrum of vinyl acetate. By Boedecker.
Feb 17, 1940. In German. 1.50

9459 FB L 70174 — See frame 9397.

9460 FB L 70174 — Influence of metals on vinyl acetate and vinyl acetate-acetic acid mixtures. By Horn. Feb 2, 1940.
In German. 1.50

9461 FB L 70174 — Influence of impurities on spectral number and electric number of vinyl acetate. By Horn. Jan 3, 1940.
In German. 1.50

9462 FB L 70174 — Comparative analysis of vinyl acetate. By Hauke.
Aug 18, 1939. In German. 1.50

9463 FB L 70174 — Stability of crude vinyl acetate.
By Horn. Aug 1, 1939.
In German. 1.50

9464 FB L 70174 — Influence of by-products on the purity of the product in the production of vinyl acetate.
By Krämer. Dec 15, 1937.
In German. 1.50

9465-9466 PB L 70174 — Stabilizers for vinyl acetate. By Starck. Sep 29, 1939. In German. 1.50

9467-9468 PB L 70174 — Stabilization of vinyl acetate. By Starck. Sep 6, 1939. In German. 1.50

9469-9471 PB L 70174 — Thermic course of the formation of vinyl acetate. By Perlick. Jul 1, 1938. In German. 1.50

9472-9473 PB L 70174 — Stability of acetylene, glacial acetic acid, and vinyl acetate in presence of Wacker catalyst at 240° C. Jul 15, 1938. In German. 1.50

9474-9480 PB L 70174 — Stability of vinyl acetate in presence of Wacker catalyst. By Horn. Jul 7, 1938. In German. 1.50

9481 PB L 70174 — Charging of "Mowilith KD" powder. By Boedeker. Jul 17, 1941. In German. 1.50

9482-9486 PB L 70174 — Drying dispersed powder "Mowicoll DP". By Spiecker. Sep 19, 1940. In German. 1.50

9487-9491 PB L 70174 — Drying of MVi (vinylacetate) powder in a Lurgi-Krause dryer. By Spiecker. Aug 19, 1940. In German. 1.50

9492-9495 PB L 70174 — Emulsion powder according to "Lurgi-Krause" method. By Spiecker. Jul 23, 1940. In German. 1.50

9496-9501 PB L 70174 — Drying tests of "MVi" emulsion powder with a Lurgi (Krause) dryer. By Spiecker. Jul 18, 1940. In German. 1.50

9502-9510 PB L 70174 — "MVi" emulsion powder. By Speicker. Jun 16, 1940. In German. 1.50

9511-9513 PB L 70174 — Emulsion "MVi" in dry form (Krause dryer). By Herz. Jun 12, 1940. In German. 1.50

9514-9516 PB L 70174 — "Mowicoll DP" ("Rubilosa" drying tests). By Spiecker. Sep 27, 1940. In German. 1.50

9517-9522 PB L 70174 — "MVi" drying powder and "Movicoll DP". By Spiecker. Sep 11, 1940. In German. 1.50

9523 PB L 70174 — "MVi" powder. By Starck. Aug 20, 1940. In German. 1.50

9524-9531 PB L 70174 — "MVi" emulsion powder. By Spiecker. Jun 27, 1940. In German. 1.50

9532 PB L 70174 — "MVi" dried powder. Feb 27, 1941. In German. 1.50

9533 PB L 70174 — Testing "MVi" dried powder for the leather industry. By Herz. Dec 16, 1940. In German. 1.50

9534 PB L 70174 — "MVi" dried powder. By Spiecker. May 17, 1940. In German. 1.50

9535-9551 PB L 70174 — Mowilith. n.d. In German. 2.00

9552-9559 PB L 70174 — "MV" emulsions. Nov 1939. In German. 1.50

9560-9562 PB L 70174 — Production of MVi emulsion in a vibration apparatus. By Overbeck. Nov 15, 1939. In German. 1.50

9563 PB L 70174 — "Mowilith" n.d. In German. 1.50

9564 PB L 70174 — "Mowilith" n.d. In German. 1.50

9565 PB L 70174 — "Mowilith D" approximately 60%. By Monheim. Jan 26, 1943. In German. 1.50

9566 PB L 70174 — Influence of divinyl acetylene on emulsion polymerization of vinyl acetate. Apr 27, 1942. In German. 1.50

9567-9576 PB L 70174 — "MVi" emulsion experiments in the pilot plant. By Starck. Feb 4, 1938. In German. 1.50

9577-9578 PB L 70174 — Manufacture of "Mowilith D". By Starck. Sep 15, 1943. In German. 1.50

9579 PB L 70174 — Continuous preparation of "MVi". By Starck. Sep 26, 1939. In German. 1.50

9580-9581 PB L 70174 — Discussion of "MVi" emulsions. By Patat. Sep 29, 1938. In German. 1.50

9582-9583 PB L 70174 — Manufacture of "Mowilith D". n.d. In German. 1.50

9584 PB L 70174 — "Mowilith". n.d. In German. 1.50

9585-9589 PB L 70174 — Storability of "MVi". May 17, 1939. In German. 1.50

9590-9591 PB L 70174 — "Mowilith emulsion MVi". By Freudenberger. Sep 7, 1936. In German. 1.50

9592-9594 PB L 70174 — Production of "MVi". By Monheim. Sep 25, 1941. In German. 1.50

9595-9598 PB L 70174 — "Mowilith D" approximately 60%. By Starck. Aug 5, 1941. In German. 1.50

9599-9600 PB L 70174 — Speeding up emulsion polymerization of "MVi" concentrated. By Monheim. Sep 16, 1940. In German. 1.50

9601-9602 PB L 70174 — Concentrated "MVi" and "Mowilith CT 2.5". Aug 14-21, 1939. In German. 1.50

9603-9604 PB L 70174 — "MVi" concentrated with increased amounts of vinarol. By Spiecker Jul 21, 1939. In German. 1.50

9605 PB L 70174 — Sales standards for "MV" emulsions. Sep 16, 1939. In German. 1.50

9606 PB L 70174 — "Mowilith D 32", approximately 66%. Sep 2, 1941. In German. 1.50

9607 PB L 70174 — "Mowilith D" approximately 60%. By Spiecker. Feb 3, 1941. In German. 1.50

9608 PB L 70174 — "MV emulsions". By Spiecker. Apr 2, 1940. In German. 1.50

9609 PB L 70174 — "Emulsion MVW 32". By Spiecker. Apr 2, 1940. In German. 1.50

9610-9614 PB L 70174 — "Emulsion LMV". Jul 6, 1939. In German. 1.50

9615 PB L 70174 — "Mowilith M. 60 and Mowilith emulsion". By Freudenberger. Oct 30, 1941. In German. 1.50

9616 PB L 70174 — "Mowilith D 42". By Hesse. Nov 16, 1944. In German. 1.50

9617-9620 PB L 70174 — Propane sulfanilide - "Plasticizer PSA". By Spiecker. Dec 20, 1941. In German. 1.50

9621-9623 PB L 70174 — "Plasticizer PSA" as substitute for tricresyl phosphate. By Spiecker. Oct 24, 1941. In German. 1.50

9624-9632 PB L 70174 — Continuous production of "Mowilith D 50". By Monheim. Feb 7, 1945. In German. 1.50

9633-9636 PB L 70174 — Conference on plastics. By Soukw. Jun 18, 1938. In German. 1.50

9637-9639 PB L 70174 — "Mowilith C". Apr 17, 1939. In German. 1.50

9640-9641 PB L 70174 — "Mowilith 20". By Freudenberger. Aug 25, 1942. In German. 1.50

9642-9644 PB L 70174 — Trunk colors. Dec 10, 1931. In German. 1.50

9645-9651 PB L 70174 — Continuous polymerization of "Mowilith"-types. By Hahn. Mar 19, 1940. In German. 1.50

9652 PB L 70174 — "Mowilith 20, 30, 50, 70, 90". By Freudenberger. Aug 27, 1945. In German. 1.50

9653-9657 PB L 70174 — "Mowilith H" for stiff felt caps. By Persiel. Sep 9, 1935. In German. 1.50

9658-9660 PB L 70174 — "Mowilith H". Feb 27, 1934. In German. 1.50

9661-9662 PB L 70174 — "Mowilith N, ribbon shape". By Freudenberger. Dec 16, 1935. In German. 1.50

9663-9664 PB L 70174 — "Mowilith". n.d. In Germn. 1.50

9665-9667 PB L 70174 — Test report on "Mowilith CT 2.5". By Nerz. Oct 19, 1939. In German. 1.50

9668 PB L 70174 — Plastic "CT" (= Mowilith CT 2.5). By Moller. Oct 10, 1939. In German. 1.50

9669-9670 PB L 70174 — Test of "Mowilith CT 2.5". By Nerz. Jun 23, 1939. In German. 1.50

9671 PB L 70174 — "Mowilith CT 2.5" (Pearls). By Billig. May 30, 1939. In German. 1.50

9672-9673 PB L 70174 — Ammonium salt solutions of "Mowilith CT 2.5". By Brenschede. Apr 19, 1939. In German. 1.50

9674 PB L 70174 — "Mowilith CT 2.5" in solution. Apr 17, 1939. In German. 1.50

9675 PB L 70174 — "Mowilith". By Möller. Apr 5, 1939. In German. 1.50

9676-9677 PB L 70174 — "Mowilith CT 2.5" with high and low viscosity. Mar 30, 1939. In German. 1.50

9678-9680 PB L 70174 — "Mowilith CT 2.5". Mar 20, 1939. In German. 1.50

9681 PB L 70174 — "Mowilith CT 2.5". By Weihs. Mar 17, 1939. In German. 1.50

9682 PB L 70174 — Working procedure for pigskin like products. By Weihs Feb 25, 1939. In German. 1.50

9683 PB L 70174 — "Mowilith". n.d. In German. 1.50

9684 PB L 70174 — "Mowilith CT 2.5". By Billig. Jul 18, 1939. In German. 1.50

9685-9692 PB L 70174 — "Mowilith" n.d. In German. 1.50

9693 PB L 70174 — "Mowilith". n.d. In German. 1.50

9694 PB L 70174 — "Mowilith Ct". By Billig. May 25, 1939. In German. 1.50

9695-9698 PB L 70174 — "Mowilith". n.d. In German. 1.50

9699-9700 PB L 70174 — "Mowilith Ct 10", beads. By Hahn. Jan 16, 1940. In German. 1.50

9701-9722 PB L 70174 — "Mowilith". n.d. In German. 2.50

9723-9724 PB L 70174 — "Mowilith D 420". By Freudenberger. Sep 27, 1944. In German. 1.50

9725-9730 PB L 70174 — "Mowilith". n.d. In German. 1.50

9731-9739 PB L 70174 — Emulsion "LMM 41". By Reuber. Jun 12, 1939. In German. 1.50

9740 PB L 70174 — "Mowilith". n.d. In German. 1.50

9741 PB L 70174 — "Mowilith D", approximately 60%. By Monheim. Jan 26, 1943. In German. 1.50

9742-9749 PB L 70174 — "Mowilith". n.d. In German. 1.50

9750 PB L 70174 — Latex viscosity of "MV" emulsions. Apr 17, 1942. In German. 1.50

9751-9753 PB L 70174 — Production of "MVi", concentrated. By Monheim. Nov 25, 1941. In German. 1.50

9754-9757 PB L 70174 — "Mowilith D", approximately 60%. By Starck. Aug 5, 1941. In German. 1.50

9758-9760 PB L 70174 — Improvement of emulsion "MVi". By Spiecker. Dec 3, 1940, Jan 24, Feb 6, 1941. In German. 1.50

9761-9767 PB L 70174 — "MVi" emulsions with "Vinarol H" and various acetate mixtures. By Nerz and Spiecker. Jul 21, Sep 13, Oct 9, 1939. In German. 1.50

9768-9773 PB D 70174 — "Mowilith". n.d. In German. 1.50

9774 PB L 70174 — "MVi emulsion". By Hauke. Nov 29, 1938. In German. 1.50

9775 PB L 70174 — Viscosity adjustment of "MVi" or "MVW". Nov 23, 1938. In German. 1.50

9776-9784 PB L 70174 — "Mowilith". n.d. In German. 1.50

9785-9787 PB L 70174 — Emulsion "MVi" containing plasticizers. Sep 28, 1938. In German. 1.50

9788-9799 PB L 70174 — "Mowilith". n.d. In German. 1.50

9800-9806 PB L 70174 — Tests with emulsion "MVi" in the pilot plant. By Starck. Feb 4, 1938. In German. 1.50

Plastics and Plasticizers (contd)

9809-9835 PB L 70174 "Emulsion LMi" (MVi) containing plasticizer. By Reuber. Jun 26, 1939. In German. 3.00

9836 PB L 70174 This frame is illegible.

9837-9843 PB L 70174 Continuous preparation of "MVi". By Starck and Hahn. Apr 22, Sep 26, Oct 30, 1939. In German. 1.50

9844-9849 PB L 70174 Speeding up of "MVi" polymerization. By Hahn. Oct 10, 1939. In German. 1.50

9850-9851 PB L 70174 Polymerization speed of "MVi". By Dietrich. Jun 3 1939. In German. 1.50

9852-9854 PB L 70174 Continuous bead polymerization. By Hahn. Apr 14, 1939. In German. 1.50

9855-9859 PB L 70174 "Mowilith DV" dispersions. By Spiecker. Jan 15, 1945. In German. 1.50

9860-9862 PB L 70174 "Mowilith D4 (DV)". By Starck. Dec 15, 1944. In German. 1.50

9863 PB L 70174 "Mowilith". n.d. In German. 1.50

9864-9865 PB L 70174 "Mowilith". n.d. In German. 1.50

9866 PB L 70174 "Mowilith". n.d. In German. 1.50

9867-9872 PB L 70174 "Mowilith D2". By Schlosser. Dec 2, 1943. In German. 1.50

9873-9919 PB L 70174 "Mowilith". n.d. In German. 4.00

9920-9926 PB L 70174 Ketene from acetone. By Lange Apr 25, 1934. In German. 1.50

9927-9931 PB L 70174 Ketene and diketene production (1st report). By Lange. Apr 25, 1940. In German. 1.50

9932-9940 PB L 70174 Ketene and diketene (2d report). By Lange. Jun 4, 1940. In German. 1.50

9941-9943 PB L 70174 Ketene and diketene (3d report). By Lange. Jul 5, 1940. In German. 1.50

9944-9954 PB L 70174 Ketene and diketene (4th report). By Lange. Oct 17, 1940. In German. 1.50

9955-9956 PB L 70174 Production of diketene (5th report). By Lange. Nov 5, 1940. In German. 1.50

9957-9969 PB L 70174 Production of diketene (6th report). By Lange. Dec 19, 1940. In German. 1.50

9970-9971 PB L 70174 Storing of diketene. By Lange. Feb 3, 1941. In German. 1.50

9972-9974 PB L 70174 Ketene dimerisation. By Lange. Nov 7, 1940. In German. 1.50

9975-9976 PB L 70174 Production of diketene. By Lange. Oct 25, 1940. In German. 1.50

9977-9999 1-26 PB L 70174 Ammonium nitrate. n.d. In German. 2.50

PB L 70174-S. I.G. FARBENINDUSTRIE A.G., FRANKFURT AM MAIN, GERMANY. Plastics. (FIAT Microfilm Reel O 20, Frames 9227-9999 and 1-26, abstract cards). 1931-1945. 168 p. Price: Microfilm-$4.00 - Photostat-$12.00
Brief abstract of the individual items on the above reel O-20, PB 70174, prepared by FIAT personnel in Germany.

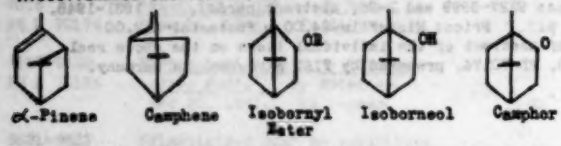
PB L 85639. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Emulsifier Kalumit - Emulgator E 1000. Jan 1945. 230 p. Price: Microfilm-$6.50 - Photostat-$23.00
Correspondence on preparation, process, and plant data concerning manufacture of emulsifier Kalumit or E 1000, similar to Nekal. The latter is an emulsifying agent for Buna polymerization, prepared from naphthalene butanol condensation and contains the sodium salts of dibutyl naphthalene monosulfonic and disulfonic acids. In German with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

Miscellaneous Chemicals

* PB L 85174. ANZILOTTI, W. F. The preparation and reactions of acrolein: Deutsche Gold- und Silber-Scheideanstalt (Degussa) Wombach, Constance, and Frankfurt/Main. (FIAT Final Rept 1157). Jan 1948. 29 p. Price: Microfilm-$0.75
(A) Acrolein was prepared in a 10-ton per month unit from acetaldehyde and formaldehyde over a sodium silicate catalyst at 300 to 325° C. An 80% yield at 45% conversion was realized (based on acetaldehyde). (B) The use of acrolein as an intermediate in the preparation of the following compounds is described: 1) a condensation product with pentaerythrit which resembles plexiglass, 2) preparation of methyl acrylate for which a 10-ton/month unit was designed but never completed, (3) preparation of formyldihydropyrane (Dimerisation), 4) condensation with ammonia to beta-picoline, or propylene-1,3-diamine, 5) reduction to allyl alcohol, or propionaldehyde, 6) condensation with vinyl cyanide, or methyl acrylate to give dihydropyrane derivatives, 7) preparation of 1,6-hexanediol, and 1,2,6-hexanetriol, 8) preparation of alpha-hydroxy aldehyde, or glutaric acid, 9) preparation of 1,3-propylene glycol, and 10) preparation of acrisin, a wrinkle proofing agent used by Rohm and Haas in Darmstadt. Microfilm copies of the research reports mentioned in the text may be obtained under PB 73715 of the Bibliography. Various flow sheets, Figs. 1-6, pertaining to the text are appended.

* PB L 85173. ANZILOTTI, W. F. The preparation of 2-methyl-5-ethylpyridine from methyl vinyl ether. (FIAT Final Rept 1314). Jan 1948. 7 p. Price: Mimeo-$0.25
2-Methyl-5-ethylpyridine is prepared in 90-95% yield from methyl vinyl ether and ammonia over a titanium phosphate catalyst at 200-220° C. and 220 atmospheres pressure. A laboratory continuous process and catalyst study is described and flow sheet is appended.

* PB L 87341. COLBORNE, R. S. and HUGGETT, W. H. German camphor industry. (BIOS Final Rept 1210, Item 22). N. d. 79 p. Price: Microfilm-$2.75 - Photostat-$8.00
The processes used for camphor manufacture have undergone changes during the past 10-15 years; chromic acid oxidation of isoborneol or camphene is now carried out in a single stage of heterogeneous catalysis, instead of converting pinene to bornyl chloride followed by dehydrochlorination to camphene. Catalysts for pinene isomerisation all have a slight acidic reaction and the mechanism is said by Prof. Meerwein to be the formation of a complex at the catalyst surface, followed by rearrangement of the pinene radicle, to camphene which is split off. The chemical reactions involved in the conversion of pinene to camphor may be written as follows:



α-Pinene | Camphene | Isobornyl Ester | Isoborneol | Camphor

It has not been found possible to develop a successful process for the direct hydration of camphene to isoborneol. cost data, flow sheets, drawings and photographs are included.

* PB L 87420. DIAMOND, C. Manufacture of cellulose acetate by the methylene chloride process with acid recovery and Wacker anhydride process (Dormagen). (BIOS Final Rept 1204, Item 22). Mar 1947. 23 p. Price: Microfilm-$1.50 - Photostat-$3.00
The following details are covered: (A) acetate manufacture - outline of process, types of production, plant capacity, raw materials, general arrangement, and process description; and (B) Wacker anhydride unit and acid recovery plant - acid recovery, manufacture of acetic anhydride by the Wacker process. Flow diagrams are attached.

PB L 73862. I. G. FARBENINDUSTRIE A. G., BITTERFELD, GERMANY. Miscellaneous reports in chemistry. (FIAT Microfilm Reel 00-190, Frames 1-568) 1927-1944. 568 f. Price: Microfilm-$6.00 - Enlargement print-$57.00.
This microfilm reel was prepared by FIAT personnel in Germany. 33 individual items are listed below and will be available as enlargement prints. The entire reel may be obtained as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
1-21 PB L 73862	Production of "Sulfixran." I. Investigations of the causes of the sintering-, sticking-and melting phenomena in the reduction of sodium sulfate to sodium sulfide with hydrogen. By Zirngibl. Mar 5, 1935. In German.	$2.50
22-37 PB L 73862	Production of "Sulfixran." II. Catalyst experiments. By Zirngibl. Jun 11, 1935. In German.	2.00
38-48 PB L 73862	Production of "Sulfixran." III. Investigations of the cause of fluctuations in the reduction results in isothermally conducted reduction in the presence of antimony as an additional catalyst. By Zirngibl and Jaeger. Sep 19, 1935. In German.	1.50
49-65 PB L 73862	Silicothermic and aluminothermic production of manganese metal from manganese carbonate. By Meyer. Oct 4-5, and Dec 16, 1943. In German.	2.00
66-85 PB L 73862	Production of calcium aluminate slags from crude phosphate and bauxite in the 800 kilowatt furnace. By Weitendorf. Oct 2, 1942. In German.	2.00
86-94 PB L 73862	Inflammability of chlorate-impregnated organic substances under the influence of radiation. By Spiess and Niehuss. Oct 5, 1938. In German.	1.50
94a-113 PB L 73862	Production of trisodium phosphate by blowing of ferrophosphorus in the converter in the presence of sodium carbonate. By Meyer. Aug 5, 1944. In German.	2.00
114-143 PB L 73862	Activity of melted iron-silicon-alloys II. By O. Meyer. Sep 6, 1944. In German.	3.00
144-166 PB L 73862	Activity of silicic acid in calcium silicate melts. By Meyer. Mar 6, 1944. In German.	3.00
167-213 PB L 73862	Activity of melted iron silicon alloys. I. By O. Meyer. May 15, 1944. In German.	5.00
214-219 PB L 73862	Preparation of pure cerium compounds. By Bonchak. Apr 30, 1937. In German.	1.00
220-227 PB L 73862	Calcium chlorate. By Ehrhardt. Aug 7, 1929, and Mar 23, 1931. In German.	1.00
228-253 PB L 73862	Prevention of corrosion and boiler scale by salts of the 6-valent chromium. By Michel. Jul 1937. In German.	3.00
254-264 PB L 73862	Operating instructions for the compressed oxygen generator. By Mi. Jan 1944. In German.	1.00
265-331 PB L 73862	Some technically important properties of amalgams. By Hohn. Mar 5, and Nov 12, 1943. In German.	7.00
332-335 PB L 73862	Corrosion of highly stressed construction and apparatus parts by magnesium chloride solution in the cold. By Michel. Jun 3, 1935. In German.	1.00
336 PB L 73862	Comparison between sodium carbonate decomposition and sodium sulfate decomposition of ferrophosphorus. Jun 29, 1927. In German.	1.00
337-344 PB L 73862	Purification of rock salt. Oct 23, 1941. In German.	1.00
345-348 PB L 73862	Action of carbon monoxide, nitrogen, and producer gas on magnesium at high temperatures. By Denk. Jul 10, 1940. In German.	1.00
349-351 PB L 73862	Determination of the magnesium oxide content of carnallite sludge occuring in the thermal production of magnesium. By Marx. Jul 7, 1940. In German.	1.00
352-368 PB L 73862	Sliding contacts. By Dittgen. Nov 15, 1941. In German.	3.00
369-392 PB L 73862	Laboratory and experimental work of the inorganic department of I. G. Farben's Wolfen plant in 1944. By Griessbach. 1944. In German.	3.00
393-402 407-417 PB L 73862	Laboratory and experimental work of the inorganic department of I. G. Farben's Wolfen plant in 1943. By Griessbach. 1943. In German.	3.00
403 PB L 73862	Comparative testing Brandis clay and hard clay from the Roter Berg near Bruex as to attack by sulfuric acid. By Pattock. Jun 23, 1943. In German.	1.00
404-406 PB L 73862	Informative experiments for obtaining titanium dioxide from Si material. By Pattock. Jun 7, 1943. In German.	1.00
418-436 PB L 73862	Laboratory and experimental work of the inorganic department of I. G.	

Farben's Wolfen plant in 1942. By Griessbach. 1942. In German. 2.00

437-463 FB L 73862 — Laboratory and experimental work of the inorganic department of I. G. Farben's Wolfen plant from May to December 1941. By Griessbach and others. In German. 3.00

463-464 FB L 73862 — The physicist in the large chemical plant. Oct 25, 1940. In German. 1.50

465-476 FB L 73862 — Laboratory and experimental work of the inorganic department of I. G. Farben's Wolfen plant in June and July 1938. Aug 1, 1938. In German. 1.50

477-536 FB L 73862 — Laboratory work and operation of the dye department of I. G. Farben's Wolfen plant. 1930, 1931, 1933 and 1934. In German. 6.00

537-546 — The experimental production of beryllium-aluminum-alloys the first half of 1944 in the Ahen plant and its evaluation. By von Zeppelin. Nov 4, 1944. In German. 1.50

547-566 FB L 73862 — Production of beryllium-aluminum-alloys. In German. 2.50

FB L 73862-S. I. G. FARBENINDUSTRIE A. G., BITTERFELD, GERMANY. Miscellaneous reports in chemistry. (FIAT Microfilm Reel CC-190, Frames 1-568, abstract cards) 1927-1944. 53 p. Price: Microfilm-$2.00 - Photostat-$4.00.
These are brief abstracts of the individual items on the above microfilm reel CC-190, FB 73862, prepared by FIAT personnel in Germany.

FB L 73487 I.G. FARBENINDUSTRIE A.G., BITTERFELD, GERMANY. Reports in various chemical fields. (FIAT Microfilm Reel AA 117, Frames 1-864). 1928-1946. 864 f.
Price: Microfilm-$6.00 - Enlargement Print-$86.50
This reel was prepared by FIAT investigators in Germany. 74 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include FB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1-6 9-10 12 14-20 FB L 73487	Production of ammonium chloride fogs. By Rattschek. Apr 8, 1943, Sep 27, 1944. In German.	$1.50
7-8 FB L 73487	Camouflage installations for the simulation of destructive fires. Patent application, dated Jan 28, 1944. In German.	1.50
9-10 FB L 73487	See frames 1-6.	
11 FB L 73487	Short reports of various patent applications. 1940. In German.	1.50
12 FB L 73487	Report on practical experiments with fog bombs. 1944 In German.	1.50
13 FB L 73487	Short reports of patent applications. Nov 26, 1940. In German.	1.50
14-20 FB L 73487	Report of a demonstration of fog at Bitterfeld on the 27th of September 1944. n.d. In German.	1.50
21-24 FB L 73487	The development of an incendiary bomb. By Ott. Jan 22, 1943. In German.	1.50
25-27 41-50 FB L 73487	Sodium perchlorate as an ingredient for explosives. Jul 29, Apr 27, 1933. In German.	1.50
28-40 FB L 73487	Sensibility to friction of sodium chlorate. By Neukirch. Jun 4, 1933. In German.	1.50
41-50 FB L 73487	See frames 25-27.	
51-64 FB L 73487	Ceric oxide from cerium silicate. By R. Schultze. Jan 15, 1941. In German.	1.50
65-69 FB L 73487	Production of fluorine and cerium from cola phosphate concentrates. By W. Wilm. Sep 2, 1941. In German.	1.50
70 FB L 73487	Production of barium chloride from barium sulfide and sulfur chloride. By Hennig. Nov 20, 1944. In German.	1.50
71-79 FB L 73487	Silicon tetrachloride. By Gruetzner. Aug 1, 1930. In German.	1.50
80-82 FB L 73487	Bleaching of technical potassium hydroxide solution. By Messner. Apr 17, 1934. In German.	1.50
83-105 FB L 73487	Processing of anode liquids from the sulfate electrolysis. By Messner. Jun 18, 1936. In German.	2.50
106-111 FB L 73487	Decomposition of calcium fluoride by means of steam. By Gruetzner. Jun 27, 1928. In German.	1.50
112-116 FB L 73487	Antifreezing agent "Mekal". By Michel. Oct 21, 1941. In German.	1.50
117-122 FB L 73487	Drying of hydrogen chloride with carnallite. By Gruetzner. Jun 22, 1928. In German.	1.50
123-143 FB L 73487	Sublimated ferric chloride obtained by chlorination of scrap iron. By Gruetzner. Mar 9, 1933. In German.	2.50
144-218 FB L 73487	Dissolving magnesium oxide in carbon dioxide and water under pressure to magnesium bicarbonate. By Schaufler. Mar 1943. In German.	7.50
219-224 FB L 73487	New flashlight mixtures. By Neukirch. Feb 6, 1937. In German.	1.50
225-227 FB L 73487	The I.G. immersion process for colored glazing "Buntbrand". Apr 25, 1934. In German.	1.50
228-233 FB L 73487	X-ray examination of "Eloxal" (electrically oxidized) layers. By Mitz. Nov 3, 1941. In German.	1.50
234-236 FB L 73487	The volatility of carnallite in vacuum. By Denk. May 29, 1941. In German.	1.50

237-238 PB L 73487 — The reaction of iron with the potassium and sodium hydroxide melt. By Denk. Apr 26, 1941. In German. 1.50

239-259 PB L 73487 — An ultramicroscope at Bitterfeld. By Marx. Sep 28, 1942. In German. 2.50

260-265 PB L 73487 — X-ray photographs of "Griesodyn" preparations. By Morawietz. Oct 20, 1942. In German. 1.50

266-267 PB L 73487 — Boric acid from boracite. By Marx. Sep 22, 1941. In German. 1.50

268-271 PB L 73487 — Fluorine from cola phosphate. By Marx. Mar 30, 1946. In German. 1.50

272-275 PB L 73487 — Phosphorus oxychloride. By Waengens. Oct 6, 1943. In German. 1.50

276 PB L 73487 — Application of sulfur chloride. By Hennig. Feb 22, 1943. In German. 1.50

277-278 PB L 73487 — Production of phosphorus oxychloride. By von der Bruck. Apr 30, 1942. In German. 1.50

279-286 PB L 73487 — Ethylation of phosphorus trichloride. By Strobel. Dec 1, 1941. In German. 1.50

287-289 PB L 73487 — Production of phosphorus oxychloride. By Ruppert. Nov 12, 1941. In German. 1.50

290-304 PB L 73487 — Reaction of magnesium oxide with carbon. By Morawietz and von Mack. n.d. In German. 1.50

305-320 PB L 73487 — The present situation with regard to hydrochloric acid electrolysis. By Messner and Hölemann. Mar 12, 1942. In German. 2.00

321-326 PB L 73487 — Reduction of metal oxides by silicon. By Morawitz. Mar 12, 1942. In German. 1.50

327-329 PB L 73487 — The silicothermal production of metals and ferro alloys. By Meyer. Mar 12, 1942. In German. 1.50

330-333 PB L 73487 — The hydrostatic behavior of dust particles according to the Polysius process. By Fuchs. Mar 12, 1942. In German. 1.50

334-364 PB L 73487 — Experiments for dressing sea sands from the Kurland sand dunes containing ilmenite. By Erberich. Aug 1939. In German. 3.50

365-391 PB L 73487 — Substitutes for asbestos in asbestos cement products. By Klock. Jan 27, Feb 6, 1937, Jun 6, 1939. In German. 3.00

392-422 PB L 73487 — Relation between optic and gravimetric determination of dust in the atmosphere. By Schmeel and Teubner. Jan 30, 1939. In German. 3.50

423-428 PB L 73487 — Red under-glaze colors. By Schmidt. Apr 5, 1938. In German. 1.50

429-436 PB L 73487 — Recovering concentrates containing iron from soft coal ashes. By Strassen. Apr 1, 1938. In German. 1.50

437-449 PB L 73487 — Iron oxide having a metallic luster. By Krings. Apr 1, 1938. In German 1.50

450-457 PB L 73487 — Method for analysing pyrolusite. By Pieper. Jan 21, 1938. In German. 1.50

458-477 PB L 73487 — Comparison of the contact systems of the Kuhlmann and the I.G. Lurgi-American process for the production of sulfuric acid. By Reismann Mar 9, 1944. In German. 2.00

478-482 PB L 73487 — Silicic esters as binding agents. By Pattock. Jul 21, 1939. In German. 1.50

483-499 PB L 73487 — Magnesia cement from chromate sludge. By Ehrhardt and Spies. Feb 28, 1941. In German. 3.00

500-541 PB L 73487 — Utilization of chromium containing waste liquors from "eletron" pickling plants. By Straschill. Nov 17, 1941. In German. 4.50

542-547 PB L 73487 — The sawing of sapphire. By Espig. Sep 20, 1941. In German. 1.50

548-555 PB L 73487 — Filtration of molybdic and tungstic acid. By Marx. Jan 4, 1943. In German. 1.50

556-563 PB L 73487 — Separation of sodium chloride from brine by means of hydrochloric acid. By Fleck. Jun 18, 1943. In German. 1.50

564-572 PB L 73487 — Production of chlorite. By Krings. Apr 28, 1944. In German. 1.50

573-580 PB L 73487 — The production of soda lime. By Heres. May 8, 1942. In German. 1.50

581-589 PB L 73487 — Production of cerite chloride from monazite sand. By Marx. Nov 6, 1940. In German. 1.50

590-592 PB L 73487 — Detection of arsenic in the atmosphere. By Fuchs. Apr 2, 1942. In German. 1.50

593-610 PB L 73487 — Production of phosphoric acid free of arsenic. By Rodes. Mar 27, 1939. In German. 2.00

611-622 PB L 73487 — Removing arsenic from technically pure phosphoric acid. By Weitendorf. Jun 21, 1939. In German. 1.50

623-629 PB L 73487 — Removal of silicon from clay. By Denk. Dec 9, 1940. In German. 1.50

630-634 PB L 73487 — Analytical investigations of caustic lime. By Richter. Jun 10, 1942. In German. 1.50

635-653 PB L 73487 — Production of aluminum fluorides. By Harder. Jun 15, 1942. In German. 3.00

654-690
691-722
PB L 73487 — Examination of ammonium nitrate. By Espig. Oct 9, 1944, Jan 6, 1945. In German. 4.00

691-722 PB L 73487 — See frames 654-690

723-744 PB L 73487 — Saving synthetic phosphoric acid in the production of phosphate fertilizer. By Weitendorf. Jun 10, 1937. In German. 2.50

Miscellaneous Chemicals (contd)

745-770 PB L 73487 — Application of the Cottrell-Dust of the phosphorus furnaces for the production of "Nitrophoska". By Rodio. Jan 16, 1939. In German. 3.00

771-792 PB L 73487 — Microscopic determination of fluorine in plants. By Teubner. Feb 4, 1941. In German. 2.50

793-798 PB L 73487 — Drying of chloride of lime and other experiments. By Krings. Oct 28, 1942. In German. 1.50

799 PB L 73487 — Test method for chloride of lime. Sep 9, 1942. In German. 1.50

800-803 PB L 73487 — Dehydrating of chloride of lime containing water of crystallisation. Draft of patent application dated Mar 24, 1942. In German. 1.50

804-814 PB L 73487 — Process for the production of chlorine monoxide. Draft of patent application dated Mar 24, 1943. In German. 1.50

815-820 PB L 73487 — Drying of chloride of lime in a gas stream. By Morawietz. Nov 10, 1941. In German. 1.50

821-864 PB L 73487 — Processing of Mansfeld furnace sows. By Schneider and others. Nov 1934. In German. 4.50

PB L 73487-S — I.G. FARBENINDUSTRIE A.G., BITTERFELD, GERMANY. Reports in various chemical fields. (FIAT Microfilm Reel AA 117, Frames 1-864, abstract cards). 1928-1946. 74 p. Price: Microfilm-$2.00 - Photostat-$5.00

Brief abstracts of the individual items on the above reel AA 117, PB 73487, prepared by FIAT personnel in Germany.

PB L 70053. I. G. FARBENINDUSTRIE A. G., BOBINGEN, GERMANY. Miscellaneous reports. (FIAT Microfilm Reel D-12, Frames 1-971) 1934-1945. 970 f. Price: Microfilm-$6.00 - Enlargement print-$97.00.

This microfilm reel was prepared by FIAT personnel in Germany. 93 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
1-32 PB L 70053	Boundary surface physical problems of the viscose process. By Meskat. Dec 21, 1942. In German.	$3.50
33-38 PB L 70053	Continuous production of graphite oil pastes. Sep 4, 1944. In German.	1.50
39-46 PB L 70053	Cleaning pre-heaters with hydrochloric acid and caustic soda solution. Jun 15, 1944. In German.	1.50
47-49 PB L 70053	Production of carbon electrodes. By Meskat. Dec 14, 1944. In German.	1.50
50-52 PB L 70053	Screw press experiments for manufacturing green carbon electrodes. By Meskat and Peters. Aug 31, 1944. In German.	1.50
53-58 PB L 70053	Worm-gear device for manufacturing tubes and profiles from P. C. U. hard (polyvinyl chloride). By Meskat. Aug 12, 1940. In German.	1.50
59-62 PB L 70053	The behavior of tanned leather in methylene chloride. By Meskat. Oct 20, 1948. In German.	1.50
63-65 PB L 70053	The use of polyamide 6/51 as initial material. By Meskat. Oct 11, 1940. In German.	1.50
66-71 PB L 70053	The influence of carbonic acid on the corrosion of sheet iron. By Meskat. Jun 7, 1940. In German.	1.50
72-74 PB L 70053	Condensation products of alkali polysulfides with polychlorinated hydrocarbons. By Meskat. Dec 12, 1939. In German.	1.50
75-78a PB L 70053	Copper quality of film casting ribbons. By Meskat. Aug 1, 1939. In German.	1.50
79-103 PB L 70053	The dissolving process of high molecular substances. By Meskat. Dec 14, 1938. In German.	3.50
104-112 PB L 70053	Testing of plastic sheets with infrared rays. By Meskat. Oct 18, 1942. In German.	1.50
113-118 PB L 70053	Examination of defects in sheets of plastics. By Meskat and others. n.d. In German.	1.50
119-120 PB L 70053	Manufacturing of rods for bombs and pressure distribution of new hollow charges. By Meskat. Jul 13, 1942. In German.	1.50
121-123 PB L 70053	Research on counter-current dialysis. By Meskat. Dec 23, 1938. In German.	1.50
124-143 PB L 70053	Examination of the plated cellulose boiler in the K-cellulose factory. By Meskat. Mar 28, 1939. In German.	2.00
144-147 PB L 70053	Spectroscopic analysis of the cellulose boiler 2 of the K-cellulose factory. By Meskat. Mar 14, 1942. In German.	1.50
148-152 PB L 70053	Examination of acid boiler plates. By Meskat. Mar 3, 1942. In German.	1.50
153-160 PB L 70053	The reaction of material in the "Visira"-soap bath. By Meskat. Feb 11, 1938. In German.	1.50
161-203 PB L 70053	Corrosion resistance of protective coatings on metal, wood and asbestos cement. By Meskat. Sep 22, 1937. In German.	4.50
204-211 PB L 70053	Testing of electrolytically manufactured, endless copper strips. By Meskat. Dec 17, 1937. In German.	1.50
212-221 PB L 70053	The influence of molybdenum, nickel and manganese additions to chrome steels on their suitability in sulfite boiling liquors. By Meskat. Aug 5, 1937. In German.	1.50
222-242 PB L 70053	Examination of materials such as chrome steels and nickel steels on the resistance to sulfuric acid. By Meskat. Jun 1, 1937. In German.	2.50
243-264 PB L 70053	Substitute material for the IT plant. By Meskat. Jun 3, 1937. In German.	2.50
265-272 PB L 70053	Substitutes for lead, tin and nickel in P.V.C. plants. By Meskat. Jan 21, 1937. In German.	1.50

273-281 PB L 70053 — Substitutes in photographic plants. By Meakat. Feb 10, 1937. In German. 1.50

282-297 PB L 70053 — The stability of beryllium alloys in "Vistra" spinning bath and viscose. By Meakat. Nov 26, 1937. In German. 2.00

298-299 PB L 70053 — Resistance to wear of a "Tana-Special" floor plate. By Meakat. Jul 14, 1939. In German. 1.50

300-302 PB L 70053 — Testing of the concrete in a support foundation in the S-cellulose boiling plant. By Meakat. Jan 13, 1939. In German. 1.50

303-314 PB L 70053 — Use of austenitic chrome-nickel-nitrogen steels. By Meakat. Mar 3, 1942. In German. 1.50

315-319 PB L 70053 — Corrosion-test of non-rusting steels in cord-sewage. By Meakat. Mar 2, 1942. In German. 1.50

320-323 PB L 70053 — Corrosion of forged iron through cyclam sulfuric acid. By Meakat. Dec 7, 1939. In German. 1.50

324-328 PB L 70053 — The stability of "Chrome", "Electron," "Pollopas," "Mipolam" and brass in the "Vistra" spinning bath and caustic soda solution. By Meakat. Feb 24, 1936. In German. 1.50

329-332 PB L 70053 — Use of alloyed steels for NO-pressure boilers. By Meakat. Jul 13, 1942. In German. 1.50

333-336 PB L 70053 — The preserving value of the chromating process. By Meakat. Jul 8, 1942. In German. 1.50

337-342 PB L 70053 — The protective value of galvanic chrome coatings. By Meakat. Jul 23, 1942. In German. 1.50

343-346 PB L 70053 — Corrosion of the sieve sheets of the S-cellulose boiler. By Meakat. Jan 29, 1945. In German. 1.50

347-368 PB L 70053 — Experience with a V2A plated cellulose boiler, and a tank wagon plated with Remanit 1610 S. By Meakat. Mar 23, 1943. In German. 2.50

369-374 PB L 70053 — Reaction of several materials to different baths of the N-cellulose plant. By Meakat. Jul 3, 1936. In German. 1.50

375-381 PB L 70053 — Boschling alloy "Turodit R. G." in several baths. By Meakat. Jun 6, 1936. In German. 1.50

382-395 PB L 70053 — The reaction of several kinds of stones under different circumstances. By Meakat. May 7, 1936. In German. 1.50

396-406 PB L 70053 — The reaction of VA-steels in the cellulose boiling process (sulfite method). By Meakat. Feb 3, 1936. In German. 1.50

407-412 PB L 70053 — The reaction of modern alloyed steels to a 1 : 1 mixture of sulfite acid and waste liquor. By Meakat. Oct 29, 1935. In German. 1.50

413-423 PB L 70053 — The reaction of different bronzes to sulfuric acid and brines. By Meakat. Apr 12, 1935. In German. 1.50

424-428 PB L 70053 — The reaction of welded V 2A- and V 4A samples to 1 : 1 mixture of sulfite acid and sulfite waste liquor. By Meakat. Apr 9, 1935. In German. 1.50

429-431 PB L 70053 — Substitute steels for VA. By Meakat. Jun 11, 1936. In German. 1.50

432-438 PB L 70053 — Report illegible. By Meakat. Feb 1, 1935. In German. 1.50

439-442 PB L 70053 — Comparing the wear and tear of new Muldenstein stone plates with a Muldenstein plate already used. By Meakat. Jan 14, 1935. In German. 1.50

443 PB L 70053 — Reaction of "V4A Swora" samples in spinning baths. By Meakat. Dec 14, 1934. In German. 1.50

444-456 PB L 70053 — Results and experiments with chromium platings. By Meakat. Mar 26, 1943. In German. 1.50

457-466 PB L 70053 — The reaction of bronzes to sulfuric acid and brines. By Meakat. Jun 26, 1935. In German. 1.50

467-474 PB L 70053 — Testing of material for the furfural plant. By Meakat. Dec 8, 1944. In German. 1.50

475-476 PB L 70053 — Kneading pumps and worm pumps. By Sigwart and Meakat. Feb 2, 1945. In German. 1.50

477-484 PB L 70053 — Calculation of the decrease of pressure of a spinning solution pipe system. By Meakat. Dec 14, 1934. In German. 1.50

485-487 PB L 70053 — Calculation of the decrease of pressure of an intermediate solution pipe. By Meakat. Dec 21, 1934. In German. 1.50

488-491 PB L 70053 — The viscocity of viscose. By Meakat. Nov 29, 1935. In German. 1.50

492-494 PB L 70053 — The viscocity of the Dornagan spinning solution. By Meakat. Feb 9, 1937. In German. 1.50

495-498 PB L 70053 — The viscocity of "PC"-solution. By Meakat. Feb 20, 1937. In German. 1.50

499-533 PB L 70053 — Calculation of the fall of pressure in pipes in which highly viscous liquids are flowing. By Meakat. Jan 29, 1937. In German. 3.00

534-549 PB L 70053 — The viscosity anomalies in "V"-masses. By Meakat. Mar 18, 1937. In German. 2.00

550-553 PB L 70053 — Determination of the absolute viscosity of samples of linters. By Meakat. Jul 16, 1937. In German. 1.50

554-562 PB L 70053 — Viscosimeter for elastoviscous liquids. By Meakat. Nov 13, 1939. In German. 1.50

563-569 PB L 70053 — The motion of a cellulose paste in pipes and in cylindrical containers. By Meakat. Mar 13, 1942. In German. 1.50

570-575 PB L 70053 — The viscosity of "Meraolate" solution. By Meakat. Feb 29, 1944. In German. 1.50

576-589 PB L 70053 — Measuring of the curling of rayon staple. By Meakat and Rover. Nov 23, 1939. In German. 1.50

590-592 PB L 70053 — The structure of crimped rayon staple. By Meskat and Reichle. Jul 24, 1942. In German. 1.50

593-595 PB L 70053 — Spectroanalytic control of the cellulose and vistra production. By Meskat and Hörmann. Jul 31, 1942. In German. 1.50

596-597 PB L 70053 — Crisping examination of fibers by means of double refraction. By Röver. Jun 20, 1940. In German. 1.50

598 PB L 70053 — Letter accompanying a report. Enclosure missing. In German. 1.50

599-609 PB L 70053 — Recovery of sodium sulfate and sulfuric acid from "Vistra" spinning baths and waste acids. By Griessbach. Sep 28, 1934. In German. 1.50

610-618 PB L 70053 — Production of sodium thio-sulfate. By Döring. Feb 3, 1939. In German. 1.50

619-632 PB L 70053 — The gypsum sulfuric acid method of I. G. Farben. Mar 23, 1939. In German. 1.50

633-635 PB L 70053 — Purifying washing acid with sodium thiosulfate. By Döring. Mar 22, 1939. In German. 1.50

636-639 PB L 70053 — Catalysts for the reaction of roast gases in the SO_3 plant. By Otto and Schreiner. Feb 28, 1941. In German. 1.50

640-668 PB L 70053 — Cord rayon. By Jehle. Dec 14, 1943. In German. 3.00

669-684 PB L 70053 — Cord rayon, "Rottweil." By Diem. Nov 24, 1943. In German. 2.00

685-800 PB L 70053 — Fast dyeing of bobbin ries of rayon. By Diem. Jan 13, 1942. In German. 12.00

801-830 955-962 PB L 70053 — Directions for producing dyestuffs. 1939. In German. 3.00

831-840 PB L 70053 — The effect of gold compounds on photographic emulsions. By Koslowsky. Nov 4, 1936. In German. 1.50

841-850 PB L 70053 — The effect of additions of noble metals on different photographic emulsions. By Müller. Nov 5, 1936. In German. 1.50

851-884 PB L 70053 — Testing of the wearing strength of rayon staple. By Jehle. Feb 20, 1940. In German. 3.50

885-892 PB L 70053 — Spinning experiments with berium-containing viscoses. By Steude. Nov 15, 1937. In German. 1.50

893-896 PB L 70053 — Rapid viscose from beech wood cellulose. By Diem. May 23, 1940. In German. 1.50

897-908 PB L 70053 — Technical progress in raw viscose. By Diem. Oct 23, 1939. In German. 1.50

909-913 PB L 70053 — Experiments with rapid viscose. By Schmid. Oct 23, 1943. In German. 1.50

914-926 PB L 70053 — Caustic soda solution in the viscose production. By Knapp. Jun 25, 1937. In German. 1.50

927-930 PB L 70053 — Spinning experiments with viscoses containing calcium, magnesium and aluminum. By Steude. Feb 9, 1938. In German. 1.50

931-936 PB L 70053 — Testing different kinds of cellulose for inorganic impurities. By Steude. Feb 19, 1938. In German. 1.50

937-945 PB L 70053 — Spinning experiments with different spinning baths. By Rottweil. Feb 19, 1936. In German. 1.50

946-954 PB L 70053 — The dyeing of rayon in rim or ball form. By Diem. Jul 17, 1939. In German. 1.50

955-962 PB L 70053 — See frames No. 801-808. In German. 1.50

963-971 PB L 70053 — Method of dyeing rayon yarn balls. By Wilmanns and Hartmuth. n.d. In German. 1.50

PB L 70053-S. I. G. FARBENINDUSTRIE A. G., BOBINGEN, GERMANY. Miscellaneous reports. (FIAT Microfilm Reel D-12, Frames 1-971, abstract cards). 1934-1945. 93 p. Price: Microfilm-$2.00 - Photostat-$7.00. These are abstract cards for the above FIAT microfilm reel, D-12, PB 70053, prepared by FIAT personnel in Germany.

PB L 70272. I.G. FARBENINDUSTRIE A.G., FRANKFURT AM MAIN, GERMANY. Organic preparations and related subjects. (FIAT Microfilm Reel AA 87, Frames 1-715). 1928-1944. 715 f. Price: Microfilm-$5.00 - Enlargement Print-$71.50 This reel was prepared by FIAT investigators in Germany. 24 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $5.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1 PB L 70272	Distillation and oil determination of crude isobutyl oil. Jan 6, 1944. In German.	$1.50
2 PB L 70272	Colorimetric determination of cobalt. Aug 1940. In German.	1.50
3 PB L 70272	Determination of small quantities of iron carbonyl in gases. Feb 23, 1942. In German.	1.50
4-59 PB L 70272	Conferences, work reports and various instructions. n.d. In German.	6.00
60 PB L 70272	The influence of the CO-content of methanol-synthesis gas on the quality of crude- and pure methanol. By Wiedemann. Dec 7, 1943. In German.	1.50
61-117 PB L 70272	Conferences, work reports and various instructions. n.d. In German.	6.00
118-129 PB L 70272	Contribution to the technique of calculating the results of quantitative spectral analyses in an industrial laboratory. By Schuhknecht. Feb 1, 1944. In German.	1.50
130-173 184-445 PB L 70272	Analytical methods. n.d. In German.	4.50

174-183 PB L 70272 — An exact rapid volumetric determination of the total sulfur in roasted pyrite. By Zimmermann. Mar 1, 1943. In German. 1.50

184-445 PB L 70272 — Analytical methods. n. d. In German. 26.50

446-461 PB L 70272 — Chemical transformation of methane by steam and carbonic acid into a gas mixture of H_2 and CO in the proportion of 2 : 1. By Shiller. Oct 21, 1936, Mar 10, 1941. In German. 2.00

462-470 PB L 70272 — Communication concerning the preparation of hydrocyanic acid from methane, ammonia and air on a pilot plant scale. By Andrussow and Hulbrich. Jul 31, 1930. In German. 1.50

471-473 PB L 70272 — Conferences, work reports and various instructions. n.d. In German. 1.50

474-508 PB L 70272 — Preparation of hydrocyanic acid from carbon monoxide gas according to the contact process in the laboratory of the ammonia plant at Merseburg. n.d. In German. 3.50

509-530 PB L 70272 — Thermodynamic calculation of methanol equilibrium. By Langheinrich. May 24, 1928. In German. 2.50

531-561 PB L 70272 — Applicability of zinc and chromium minerals as catalysts in the methanol-synthesis. By Willfroth and Giesler. Jan 25, 1928. In German. 3.50

562-600 PB L 70272 — Catalytic preparation of hydrocyanic acid from ammonia, methane and air. By Andrussow. Nov 20, 1934. In German. 4.00

601-620 PB L 70272 — Elimination of hydrocarbons from butyl oil and from the methanol obtained from it. By Indert May 31, 1938. In German. 2.00

621-657 PB L 70272 — The elimination of heat from chemical processes. By Rud and Mayer. Jan 28, 1931. In German. 4.00

658-669 PB L 70272 — Start of the operation of the methanol plant at Waldenburg. By Bossert. Dec 8, 1942. In German. 1.50

670-674 PB L 70272 — Conferences, work reports and various instructions. n.d. In German. 1.50

675-683 PB L 70272 — Methanol furnaces made of iron. Sep 27, 1934. In German. 1.50

684-689 PB L 70272 — Contact tubes for methanol furnaces. Sep 12, Aug 28, 1934, Nov 1, 1933. In German. 1.50

690-715 PB L 70272 — Conferences, work reports and various instructions. n.d. In German. 3.00

PB L 70272-S I.G. FARBENINDUSTRIE A.G., FRANKFURT AM MAIN, GERMANY. Organic preparations and related subjects. (FIAT Microfilm Reel AA 87, Frames 1-715, abstract cards). 1928-1944. 22 p. Price: Microfilm-$1.00 - Photostat-$2.00

Brief abstracts of the individual items on the above reel AA 87, PB 70272, prepared by FIAT investigators in Germany.

PB L 70359. I. G. FARBENINDUSTRIE A. G., FRANKFURT AM MAIN/HOCHST, GERMANY. Various chemical reports. (FIAT Microfilm Reel C 37, Frames 2784-3689) 1927-1945. 905 f. Price: Microfilm-$6.00 - Enlargement print-$90.50

This reel was prepared by FIAT investigators in Germany. 124 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
2784-2785 2787-2809 2811-2814 2817-2830 2834-2866 2896-2902 2917-2942 2947-2962 2965-3009 3012-3020 3023-3038 3041-3118 3274-3279 3297-3302 3333-3347 3349-3352 3362-3368 3370-3377 PB L 70359	Miscellaneous internal information such as prices, delivery overhead, calculations, smaller plant occurrences, shipping rules, conference dates, credit demands, sales, packing, apparatus supply, etc. 1927-1940. In German.	$32.00
2786 PB L 70359	Amino sulfonic acid. By Max Wyler Blackley. In German. Patent 2,109,952, dated Sep 16, 1936.	1.50
2787-2809 PB L 70359	See Frames 2784-2785.	
2810 PB L 70359	Sulfamic acid = amino sulfonic acid. Oct 12, 1938. In German.	1.50
2811-2814 PB L 70359	See Frames 2784-2785.	
2815-2816 PB L 70359	See Frame 2810.	
2817-2830 PB L 70359	See Frames 2784-2785.	
2831-2832 PB L 70359	Chloroaminosulfonic acid. By Ketzer. Nov 9, 1936. In German.	1.50
2833 PB L 70359	Amino compounds as textile aids. By Ketzer. May 20, 1936. In German.	1.50
2834-2866 PB L 70359	See Frames 2784-2785.	
2867-2875 PB L 70359	Aniline phosphates. By Fitzky and Banthien. Mar 28, 1939. In German.	1.50
2876-2881 PB L 70359	Identical with Frames 3671-3681.	1.50
2882 PB L 70359	Oxidation of arsenic trioxide. By Larbig. Oct 27, 1942. In German.	1.50
2883-2886 PB L 70359	The production of calcium arsenate from arsenic, chlorine, and lime. By Ketzer. Jul 4, 1940. In German.	1.50
2887-2895 PB L 70359	Production of calcium arsenate from arsenic slime. By Oswald. Jul 3, 1940. In German.	1.50
2896-2902 PB L 70359	See Frames 2784-2785.	

Miscellaneous Chemicals (contd)

2903-2911 PB L 70359 — Calcium arsenate. By Oswald. Mar 11, 1939. In German. 1.50

2912-2916 PB L 70359 — Production of arsenic acid from waste arsenic slime. By Oswald. Jan 11, 1939. In German. 1.50

2917-2942 PB L 70359 — See Frames 2784-2785.

2943-2946 PB L 70359 — The production of calcium arsenate from arsenic slime. By Oswald. Aug 18, 1932. In German. 1.50

2947-2962 PB L 70359 — See Frames 2784-2785.

2963-2964 PB L 70359 — Calcium arsenate. By Krdulein. Apr 11, 1932. In German. 1.50

2965-3009 PB L 70359 — See Frames 2784-2785.

3010-3011 PB L 70359 — Calcium arsenate. By Mossbrugger. Apr 23, 1942. In German. 1.50

3012-3020 PB L 70359 — See Frames 2784-2785.

3021-3022 PB L 70359 — Identical with Frames 2943-2946. 1.50

3023-3038 PB L 70359 — See Frames 2784-2785.

3039-3040 PB L 70359 — Identical with Frames 2963-2964. 1.50

3041-3118 PB L 70359 — See Frames 2784-2785.

3119-3127 PB L 70359 — Arsenic from arsenic slime. By Meder. Mar 24, 1931. In German. 1.50

3128-3163 PB L 70359 — Arsenic, arsenates. Nov 1927-Jun 1932. In German. 4.00

3164-3194 PB L 70359 — Lead cyanamide. By Ketzer. Oct 20, 1942, Apr 2, 1943. In German. 3.50

3195-3200 PB L 70359 — Processing lead sulfide residues to lead dioxide. By Schnell. Feb 13, Mar 1940. In German. 1.50

3201 PB L 70359 — Hexamethylene diisocyanate. By Bastien. Mar 20, 1939. In German. 1.50

3202-3207 PB L 70359 — Hydrogen chloride production by burning coal gas with chlorine and steam. Mar 21, 1938. In German. 1.50

3208-3218 PB L 70359 — Electrolytic regeneration of chromic acid. By Oswald. Oct 23, 1941. In German. 1.50

3219-3227 PB L 70359 — Fermentative fodder with trichloroacetamide. By Haas. Apr 2, 1937. In German. 1.50

3228-3234 PB L 70359 — "Cantan." By Oswald. Apr 29, 1939, Nov 3, 1940. In German. 1.50

3235-3258 PB L 70359 — Carbide production. By Benthien. May 31, Aug 18, 22, 1938. In German. 2.50

3259-3260 PB L 70359 — Platinum catalytic wire screening. By Teske. Mar 22, 1938. In German. 1.50

3261-3262 PB L 70359 — Palladium catalyst production by treatment of anhydrous palladium chloride with concentrated hydrochloric acid. By Teske. May 25, Dec 2, 1937. In German. 1.50

3263-3264 PB L 70359 — Production of palladium catalyst by aluminum oxide with palladium. By Teske. May 24, 1937. In German. 1.50

3265-3266 PB L 70359 — Palladium catalyst produced by dissolving $Pd(NO_3)_2$ and $Ag\,NO_3$ in water. May 18, 1937. In German. 1.50

3267 PB L 70359 — Palladium catalyst production by dissolving $Pd(NO_3)_2$ and $Al(NO_3)_3$ in water. May 18, 1937. In German. 1.50

3268-3269 PB L 70359 — Stirring process in monovinylacetylene hydrogenation with various catalysts. By Wulff. Mar 22, 1937. In German. 1.50

3270 PB L 70359 — Raney nickel catalyst. By Oswald. Mar 18, 1937. In German. 1.50

3271-3273 PB L 70359 — Catalyst examinations in the trickling process. By Berndt. Mar 3, 1937. In German. 1.50

3274-3279 PB L 70359 — See Frames 2784-2785.

3280-3290 PB L 70359 — Production and testing of palladium catalysts used in the trickling tower process. By Teske. Dec 14, 1936. In German. 1.50

3291-3296 PB L 70359 — Palladium catalysts. By Teske and Berndt. Dec 8, 10, 1936. In German. 1.50

3297-3302 PB L 70359 — See Frames 2784-2785.

3303-3317 PB L 70359 — Comparative examinations of the activity of a series of catalysts for the monovinylacetylene hydrogenation. By Berndt and Teske. Nov 17, 26, 1936. In German. 1.50

3318-3321 PB L 70359 — Palladium catalyst production by treatment of anhydrous palladium chloride with concentrated hydrochloric acid. By Teske. Nov 21, 1936. In German. 1.50

3322 PB L 70359 — Palladium-rhodium catalyst (No. 410). By Teske. Nov 26, 1936. In German. 1.50

3323 PB L 70359 — Palladium oxide catalyst. By Teske. Nov 24, 1936. In German. 1.50

3324 PB L 70359 — Palladium catalyst No. 395 on a piece of burnt clay. By Teske. Nov 26, 1936. In German. 1.50

3325 PB L 70359 — Palladium catalyst No. 390. By Teske. Nov 26, 1936. In German. 1.50

3326-3330 PB L 70359 — Examinations of catalysts in the monovinylacetylene hydrogenation. By Berndt. Nov 17, 1936. In German. 1.50

3331 PB L 70359 — Instruction for the wool catalyst No. 397. By Teske. Nov 17, 1936. In German. 1.50

3332 PB L 70359 — Palladium catalyst No. 402. By Teske. Nov 17, 1936. In German. 1.50

3333-3347 PB L 70359 — See Frames 2784-2785.

3348 PB L 70359 — Palladium catalyst No. 381. By Teske. Oct 23, 1936. In German. 1.50

3349-3352 PB L 70359 — See Frames 2784-2785.

3353 PB L 70359 — Production of an alcohol catalyst free from water. By Teske. Oct 21, 1936. In German. 1.50

3354 PB L 70359 — Production of the Permutit catalyst. By Teske. Oct 20, 1936. In German. 1.50

3355-3361 PB L 70359 — Experiences with various catalysts. By Teske. Oct 10, 1936. In German. 1.50

3362-3368 PB L 70359 — See Frames 2784-2785.

3369 PB L 70359 — Production of palladium surface catalyst, type 354a. By Teske. n. d. In German. 1.50

3370-3377 PB L 70359 — See Frames 2784-2785.

3378-3380 PB L 70359 — Palladium catalysts. By Ketzer. Aug 14, 1936. In German. 1.50

3381-3384 PB L 70359 — Catalysts for butadiene from alcohol. By Mack. Aug 13, 1936. In German. 1.50

3385-3388 PB L 70359 — Decomposition of phosphate. By Bals and Wagner. Jan 17, 1945. In German. 1.50

3389-3393 PB L 70359 — Magnesia cement (also called xylolith). By Ketzer. Mar 23, 1943. In German. 1.50

3394-3397 PB L 70359 — Production of magnesium chloride. By Oswald. Dec 16, 1941. In German. 1.50

3398-3411 PB L 70359 — Production of a highly active magnesium oxide. By Wehner. Jul 11, 1939. In German. 1.50

3412-3416 PB L 70359 — Process for the production of magnesium hydroxide. Patent application K 137548 IVb/12m (3), dated Apr 9, 1935. In German. 1.50

3417-3419 PB L 70359 — Process for the production of anhydrous magnesium chloride. British patent specification 512 390, dated Jan 4, 1939. In German. 1.50

3420-3423 PB L 70359 — Processes for the production of pure magnesia. By Banthien and Ketzer. Apr 19, 1939. In German. 1.50

3424-3425 PB L 70359 — Magnesium hydroxide. By Oswald. Jul 8, 1939. In German. 1.50

3426 PB L 70359 — Calcium nitrate liquor. By Saenger. Apr 10, 1942. In German. 1.50

3427-3428 PB L 70359 — Magnesium oxide. By Saenger. Apr 20, 1942. In German. 1.50

3429-3433 PB L 70359 — Magnesium oxide. Mar 1943. In German. 1.50

3434-3440 PB L 70359 — Magnesium carbonate. By Kroell. Oct 5, 1942. In German. 1.50

3441-3449 PB L 70359 — Magnesium oxide. By Haider. May 5, 1942. In German. 1.50

3450-3475 PB L 70359 — Magnesia and calcium nitrate from Lahn dolomite. May 10, 1939. In German. 3.00

3476-3488 PB L 70359 — Recovery of selenium from selenium-containing organic residues. By Schmidt. Jan 23, 1940. In German. 1.50

3489-3490 PB L 70359 — Regeneration of selenium from selenium solutions. By Teske. Nov 29, 1939. In German. 1.50

3490 PB L 70359 — Recovery of selenium from arsenic sludge. By Koerner. Jan 17, 1935. In German. 1.50

3491-3502 PB L 70359 — Oleum operation. By Mayn. Mar 19, Sep 17, 1941. In German. 1.50

3503-3505 PB L 70359 — Electrical removing of dust or fog. By Mayn. Jan 25, 1941. In German. 1.50

3506-3508 PB L 70359 — Sulfurylamide. By Rauh. Dec 23, 1943. In German. 1.50

3509-3512 PB L 70359 — Strontium nitrate. By Hase and Ketzer. Jun 19, Jul 25, 1944. In German. 1.50

3513-3514 PB L 70359 — Utilization of residues containing strontium. By Schad. May 26, 1944. In German. 1.50

3515-3529 PB L 70359 — Various production methods for alumina. By Ketzer. May 28, Jun 1, 1940, Aug 18, 1941. In German. 1.50

3530-3547 PB L 70359 — Production of alumina from clay by calcination with lime. Mar 1, 1940. In German. 2.00

3548-3554 PB L 70359 — The Wolfen alumina production method. By Rossmann. n. d. In German. 1.50

3555-3558 PB L 70359 — Experiments regarding the evaporation of sodium sulfide solutions. By Oswald and Ketzer. n. d. In German. 1.50

3559-3564 PB L 70359 — Mellitic acid. By Ketzer and Oswald. Mar 24, Oct 18, 1941. In German. 1.50

3565-3567 PB L 70359 — Sodium, containing mercury. By Teske. May 18, 1943. In German. 1.50

3568-3576 PB L 70359 — Ammonium thiocyanate. By Lotz. Jan 27, Mar 14, 1943, Jul 20, 1944. In German. 1.50

3577-3581 PB L 70359 — Oleic chloride. By Pape. Feb 21, May 8, 1940. In German. 1.50

3582-3585 PB L 70359 — Calcium carbonate. By Reuter. Oct 22, 1945. In German. 1.50

3586-3588 PB L 70359 — FES-rotating bands (of sintered iron). By Weiss. Nov 14, 1941. In German. 1.50

3589-3592 PB L 70359 — Nitrous oxide (N_2O). By Friedel. Dec 12, 1939. In German. 1.50

3593-3594 PB L 70359 — Prestal (an activated iron oxide). By Moosbrugger. Dec 8, 1939. In German. 1.50

3595-3596 PB L 70359 — Sulfamic acid. By Moosbrugger. Dec 8, 1939. In German. 1.50

3597-3606 PB L 70359 — Chemical steam generation. By Kiesskalt and Ketzer. Oct 28, Nov 15, 20, 1937, Jan 18, 1939. In German. 1.50

3607-3619 PB L 70359 — Nitric acid. May 15, 1941. In German. 1.50

3620-3621 PB L 70359 — Waste nitrating acid. By Moosbrugger. Feb 9, 1944. In German. 1.50

3622 PB L 70359 — Trinitrotoluene. By Kiesskalt. Oct 28, 1943. In German. 1.50

Miscellaneous Chemicals (contd)

3623-3624 PB L 70359 — "Calbecht" S - tetranitrodiphenylamine sulfone. By Saenger. Sep 1, 1943. In German. 1.50

3625-3626 PB L 70359 — Alkylate waste sulfuric acid. By Moosbrugger. Apr 17, 1943. In German. 1.50

3627-3630 PB L 70359 — Waste nitric acid. By Petersen and Moosbrugger. Mar 13, 26, 1943. In German. 1.50

3631-3637 PB L 70359 — Ammonium nitrate liquor. By Irrgang and Kaupp. Sep 9, 16, 1944. In German. 1.50

3638-3641 3645-3646 PB L 70359 — Production of pure aqueous ammonia solution from coking plant concentrates or ammonium sulfate. By Saenger. Feb 2, 1945. In German. 3.00

3642-3644 PB L 70359 — Production of ammonia from ammonium sulfate. By Weissbach. Feb 1, 1945. In German. 1.50

3645-3646 PB L 70359 — See Frames 3638-3641.

3647-3648 PB L 70359 — Production of ammonium nitrate from ammonium sulfate and calcium nitrate. By Saenger. Jan 8, 1945. In German. 1.50

3649-3664 PB L 70359 — Processing of fixed coking plant nitrogen to nitric acid. By Haider. Jan 28, 1945. In German. 2.00

3665-3667 PB L 70359 — Kaolin-paraffin size (paper sizing material). By Haider. Nov 6, 1939, Feb 15, 1940. In German. 1.50

3668-3670 PB L 70359 — The production of phenol from aniline. By Oswald. Jul 13, 1938. In German. 1.50

3671-3681 PB L 70359 — Phenol synthesis. By Bauthien. Nov 9, 1938. In German. 1.50

3682 PB L 70359 — Solid ammonium nitrite. By Ketzer. Mar 7, 1940. In German. 1.50

3683-3687 PB L 70359 — Reduction of antimony pentachloride to trichloride. By Hörner. Mar 25, 1939. In German. 1.50

3688-3689 PB L 70359 — Barium thiosulfate. By Teske. May 8, 1941. In German. 1.50

PB L 70359-S. I. G. FARBENINDUSTRIE A. G., FRANKFURT AM MAIN/HOCHST, GERMANY. Various chemical reports. (FIAT Microfilm Reel C 37, Frames 2784-3689, abstract cards) 1927-1945. 125 p. Price: Microfilm-$3.00 - Photostat-$9.00

Brief abstracts of the individual items on the above reel, C 37, PB L 70359, prepared by FIAT personnel in Germany.

PB L 70310. I.G. FARBENINDUSTRIE A.G., LEVERKUSEN, GERMANY. Reports on organic preparations and synthetic rubber. (FIAT Microfilm Reel N 70, Frames 451-1300). 1928-1944. 850 f. Price: Microfilm-$6.00 - Enlargement Prints-$85.00

This reel was prepared by FIAT investigators in Germany. 70 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
451-453 PB L 70310	Dipropenyl glycol. By Meisenburg. Nov 30, 1932. In German. Incomplete. First 6 frames on reel N 70, PB 73905.	$1.50
454-456 454-457 PB L 70310	Insecticides. By Meisenburg. Feb 2, Mar 27, 1933. In German.	1.50
458-461 PB L 70310	Dipropenylglycol. By Meisenburg. Feb 9, 1933. In German.	1.50
462-463 PB L 70310	Aging of mineral oils. By Meisenburg. Mar 1933. In German.	1.50
464-467 PB L 70310	See frames 454-456.	
468-469 PB L 70310	Tetrahydrobenzoic ester of alpha-dimethylamino-beta-methyl-gamma-hydroxypentane. By Meisenburg. Jul 10, 1933. In German.	1.50
470-477 PB L 70310	Antioxidants and vulcanization accelerators. By Meisenburg. Jul 18, 1933. In German.	1.50
478-482 PB L 70310	Copolymerization of butadiene. By Meisenburg. Aug 31, 1934. In German.	1.50
483-486 PB L 70310	Copolymerization of butadiene and methylene-methyl ethyl ketone. By Meisenburg. Sep 19, 1931. In German.	1.50
487-490 PB L 70310	Copolymerization of butadiene and acrylonitrile. By Meisenburg. Nov 5, 1931. In German.	1.50
491-495 PB L 70310	Ethers with two double bonds. By Meisenburg. Dec 5, 1931. In German.	1.50
496-500 PB L 70310	Improvement in the processing of mixed rubbers. By Meisenburg. Feb 1, 1932. In German.	1.50
501-511 PB L 70310	Polymerization of beta-chloro-butadiene and beta-chloro-gamma-methyl-butadiene. By Meisenburg. Feb 12, 1932. In German.	1.50
512-516 PB L 70310	Preparation of 1-cyano-butadiene-(1,3). By Meisenburg. Mar 19, 1932. In German.	1.50
517-518 PB L 70310	Benzoic ester of crotonaldehyde cyanohydrin. By Meisenburg. Jun 10, 1932. In German.	1.50
519-592 PB L 70310	Mixed rubbers with butadiene and chloroprene as diene components. By Meisenburg. Nov 1934, Oct, 1935. In German.	7.50
593-598 PB L 70310	Stabilizers and plasticizers. By Meisenburg. Nov 25, 1935. In German.	1.50
599-601 PB L 70310	Phenylacrylic acid derivatives, beta-cyanobutadiene, benzoic ester of crotonaldehyde cyanohydrin. By Meisenburg. Dec 12, 1938. In German.	1.50
602-603 PB L 70310	Polymerization of butadiene with activated metals. By Meyer. Oct 1928, Feb 1929. In German.	1.50
604-618 PB L 70310	The polymerization of butadiene with sodium in presence of water or compounds containing water of hydration. By Meyer. Oct 1928, Apr 1929. In German.	1.50
619-623 PB L 70310	Polymerization of butadiene with sodium in the presence of esters. By Meyer. Apr 5, 1929. In German.	1.50

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Miscellaneous Chemicals (contd)

624-627 PB L 70310 — Water determination in butadiene. By Meyer. Oct 1928, Feb 1929. In German. 1.50

628-631 PB L 70310 — Polymerization of butadiene with sodium in the presence of dioxane. By Meyer. Jun 5, 1929. In German. 1.50

632-638 PB L 70310 — Polymerization of butadiene with "Grignard" compounds. By Meyer Jun 5, 1929. In German. 1.50

639-650 PB L 70310 — Sodium polymerization of butadiene in the presence of gas black. By Meyer. Jun 5, Aug 5, 1929. In German. 1.50

651-658 PB L 70310 — Influence of the sodium surface on the polymerization of butadiene. By Meyer. Aug 5, 1929. In German. 1.50

659-664 PB L 70310 — Polymerization of butadiene with sodium-sodium chloride-powder. By Meyer. Aug 5, 1929. In German. 1.50

665-667 PB L 70310 — Sodium polymerization of butadiene in petroleum as a diluent. By Meyer. Aug 5, 1929. In German. 1.50

668-680 PB L 70310 — Sodium polymerization of butadiene in the presence of hydrates. By Meyer. Feb 5, 1930. In German. 1.50

681-696 PB L 70310 — Fractionation of rubbers. By Meyer. Feb 5, 1930. In German. 1.50

697-700 PB L 70310 — Influence of acetylenes on the sodium polymerization. By Meyer. Mar 24, 1930. In German. 1.50

701-723 PB L 70310 — Polymerization of substituted butadienes. By Meyer. Aug 11, 1930. In German. 2.50

724-731 PB L 70310 — Vinyl methyl ketone. By Meyer. Oct 2, 1930. In German. 1.50

732-735 PB L 70310 — Rubber hydrochlorides. By Meyer Mar 19, 1931. In German. 1.50

736-740 PB L 70310 — Reaction of aluminium chloride with rubber solutions. By Meyer. Mar 20, 1931. In German. 1.50

741-745 PB L 70310 — Vulcanization accelerator from the series of the mercaptobenzothiazoles. By Meyer. Jun 16, 1931. In German. 1.50

746-763 PB L 70310 — Precipitation of chlorinated rubber from carbon tetrachloride solutions or emulsions. By Meyer. Mar 7/10, 1932. In German. 2.00

764-769 PB L 70310 — Wetting and emulsifying agents from residues of petroleum refining. By Meyer. Jul 7, 1932. In German. 1.50

770-780 PB L 70310 — Condensation of proteolytic products and their hydroxyethyl derivatives with fatty acid chlorides. By Meyer. Jul 10, 1933. In German. 1.50

781-791 PB L 70310 — Textile auxiliary product Le 216a. By Meyer. Aug 8, 1934. In German. 1.50

792-796 PB L 70310 — Proteolysis. By Meyer. Mar 10, 1933. In German. 1.50

799-806 PB L 70310 — Thermal cleavage of methylcyclohexenes. By Meyer. Jul 24, 1939. In German. 1.50

807-814 PB L 70310 — Polymerization of ethylene to butylene with Fischer-Tropsch catalysts. By Meyer. Oct 20, 1939. In German. 1.50

815-834 841-850 863-1011 PB L 70310 — Dehydrogenation of butylene to butadiene. By Meyer and Bienert. Jul 1939, Oct 1944. In German. 19.00

835-840 PB L 70310 — Catalysts for the polymerization of ethylene to butylene. By Meyer. Aug 22, 1940. In German. 1.50

841-850 PB L 70310 — See frames 815.

851-862 PB L 70310 — Isomerization of butylene to 2-methyl-propene. By Meyer. Mar 27, 1941. In German. 1.50

863-1011 PB L 70310 — See frame 815.

1012-1028 PB L 70310 — Concentration of butadiene in cracking gas mixtures. By Meyer and Bienert. Oct , Dec 1944. In German. 2.00

1029-1050 PB L 70310 — Ozone decomposition of natural rubber. By Schwerdtel. Dec 1928, Apr 1929. In German. 2.50

1051-1066 PB L 70310 — Constitution of the sodium polymer and of the emulsion polymer of butadiene. By Schwerdtel. Dec 1928, Apr 1929. In German. 1.50

1067-1071 PB L 70310 — Production and properties of porous rubber powders. By Schwerdtel. Jun , Jul 1929. In German. 1.50

1072-1077 PB L 70310 — Improvement of skivings. By Schwerdtel. Jul , Aug 1929. In German. 1.50

1078-1103 1146-1153 PB L 70310 — Properties of mechanical mixtures of butadiene sodium polymers and butadiene emulsion polymers. By Schwerdtel. Aug , Oct 1929. In German. 3.50

1104-1114 PB L 70310 — Coagulation of synthetic latices by means of salts of univalent metals. By Schwerdtel. Sep , Oct 1929. In German. 1.50

1115-1122 1154-1157 1158-1185 PB L 70310 — Experiments on clear rubber syntheses. By Schwerdtel. Nov 1929, Sep 1930. In German. 4.00

1123-1140 1193-1202 1220-1232 PB L 70310 — Emulsion polymerization of butadiene-(1,3). By Schwerdtel. Nov 1929, Dec 1930. In German. 3.50

1141-1145 PB L 70310 — Emulsion polymerization of 2,3-dimethylbutadiene-(1,3). By Schwerdtel. Apr , Jun 1929. In German. 1.50

1146-1153 PB L 70310 — See frame 1078.

1154-1185 PB L 70310 — See frame 1115.

1186-1192 PB L 70310 — Co-polymerization of butadiene and methyl methylene ethyl ketone.

By Schwerdtel. Mar , Jun 1930. In German. 1.50

1193-1202 PB L 70310 — See frame 1123.

1203-1219 PB L 70310 — Influence of oxygen in processing synthetic butadiene latex. By Schwerdtel. May, Jul 1930. In German. 2.00

1220-1232 PB L 70310 — See frame 1123.

1233-1242 PB L 70310 — Exchange of the chlorine in aliphatic compounds of the polyvinyl chloride type for amino radicals. By Schwerdtel. Nov , Dec 1930. In German. 1.50

1243-1244 1280-1297 PB L 70310 — Chemical reactions of hevea latex. By Schwerdtel. 1931. In German. 2.00

1245-1272 PB L 70310 — Pelargonic acid and azelaic acid. By Schwerdtel. Sep , Oct 1931. In German. 3.00

1273-1279 PB L 70310 — Confirmatory test of the primary oxidation in rubber and rubber vulcanization products. By Schwerdtel. Oct 1931. In German. 1.50

1280-1297 PB L 70310 — See frames 1243-1244.

1298-1300 PB L 70310 — Sodium polymerization of butadiene in the presence of diluents. By Stefken. Mar 31, 1929. In German. Incomplete. Completed on Reel M 71. PB 82141. 1.50

PB L 70310-S. I.G. FARBENINDUSTRIE A.G., LEVERKUSEN, GERMANY. Reports on organic preparations and synthetic rubber. (FIAT Microfilm Reel M 70, Frames 451-1300, abstract cards). 1928-1944. 70 p. Price: Microfilm-$2.00 - Photostat-$5.00
Brief abstracts of the individual items on the above reel M 70, PB 70310, prepared by FIAT personnel in Germany.

PB L 73648. I.G. FARBENINDUSTRIE A.G., LUDWIGSHAFEN, GERMANY. Organic preparations. (FIAT Microfilm Reel M 102, Frames 257-495) 1933-1943. 239 f. Price: Microfilm-$3.25 - Enlargement Print-$24.00
This reel was prepared by FIAT investigators in Germany. 21 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $3.25. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
257-260 PB L 73643	Production of 1.2.3.4-tetrachlorobenzoic acid from tetrachlorophthalic acid. By Freytag. Nov 19, 1941. In German.	$1.50
261-265 PB L 73648	Production of 2.4-dichlorobenzotrichloride. Feb 16, 1942. In German.	1.50
266-273 PB L 73648	Process of chlorination of 2.4-dichlorotoluene. Jul 2, 1942. In German.	1.50
274-286 PB L 73648	New textile auxiliary agents. In German.	1.50
287-319 PB L 73643	Higher fatty alcohols and their sulfonates. By Petz. Mar 28, 1933. In German.	3.50
320-333 PB L 73648	Foaming agents to combat stone dust in mines. (1st report). By Petz. Apr 17, 1933. In German.	1.50
334-344 PB L 73648	Experiments of objective testing white laundry washing agents. By Hengstenberg. Sep 25, 1936. In German.	1.50
345-346 PB L 73648	Improvement of "Leonil S" manufacture (Leonil S is not specified). Oct 10, 1936. In German.	1.50
347-349 PB L 73648	Studies on the improvement of "Ramasits" (waterproofing agents containing alumina). By Hengstenberger. Oct 10, 1936. In German.	1.50
350-353 PB L 73648	Experiments to improve "Ramasit K" conc. (waterproofing agent). By Hengstenberg. Dec 18, 1936. In German.	1.50
354-364 PB L 73648	Complex-forming, organic water-softening agents. By Ender. Jun 8, 1937. In German.	1.50
365-368 PB L 73648	Production of N.N-diethyl-stearamide. By Goetz. Sep 20, 1937. In German.	1.50
369-414 PB L 73648	Textile auxiliaries from 1917 to 1936. By Guenther. Jun 4, 1938. In German.	5.00
415-424 PB L 73648	Hydrogenated camphrenic oil as a glycerol substitute (from the processing of "Phenosolvan" extracts). By Pollmann. Aug 18, 1943. In German.	1.50
425-428 PB L 73648	The semi-technical production of dihydrofuran in the tray furnace. By Stichnoth. Apr 2, 1943. In German.	1.50
429-446 PB L 73648	The production of maleic acid from benzene. By Freytag. In German.	2.00
447-449 PB L 73648	The technical production of dicyclohexylamine. By Wendelein. Jan 20, 1943. In German.	1.50
450-454 PB L 73648	Tetrahydrofurfurylalcohol from technical furfural. By Stichnoth. Apr 13, 1942. In German.	1.50
455-477 PB L 73648	The bromination of phthalic acid in aqueous solution. Dec 1, 1941. In German.	2.50
478-486 PB L 73648	The dehydrogenation of "Anol" (cyclohexanol) to "Anon"(cyclohexanone) over a brass catalyst. By Freytag/ Norting. Dec 4, 1941. In German.	1.50
487-495 PB L 73648	Progress in the production of phthalic acid in the tray furnace at Ludwigshafen. By Freytag. Dec 2, 1941. In German. Supplement to a report of Dec 22, 1939.	1.50

PB L 73648-S. I.G. FARBENINDUSTRIE A.G., LUDWIGSHAFEN, GERMANY. Organic preparations. (FIAT Microfilm Reel M 102, Frames 257-495, abstract cards) 1933-1943. 29 p. Price: Microfilm-$1.00 - Photostat-$2.00
Brief abstracts of the individual items on the above reel M 102, PB 73648, prepared by FIAT investigators in Germany.

PB L 73615. I.G. FARBENINDUSTRIE A.G., LUDWIGSHAFEN, GERMANY. Organic preparations. (FIAT Microfilm Reel M 103, Frames 496-803) 1934-1940. 307 f. Price: Microfilm-$4.00 - Enlargement Print-$31.00
This reel was prepared by FIAT investigators in Germany. 19 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $4.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
496-509 PB L 73615	Chlorination of phthalic acid in an aqueous solution (4,5-dichlorophthalic acid. By Müller. Nov 23, 1940. In German. 2nd report (1st report not available).	$1.50
510-514 PB L 73615	Production of cyclohexanol from aniline. By Wenderlein and others. Apr 20, 1940. In German.	1.50
515-518 PB L 73615	Catalytic N-methylation of aromatic amines by means of dimethyl ether. By Kaupp and Schulz. Jan 29, 1940. In German.	1.50
519-531 PB L 73615	Progress in the manufacture of phthalic acid in the tray-furnace Lu 346. By Fischer. Dec 22, 1939. In German.	1.50
532-543 PB L 73615	High-pressure hydrogenation of beta-naphthol to beta-decahydronaphthol. By Schmidt. Oct 26, 1939. In German.	1.50
544-552 PB L 73615	Cyclohexylamine. By Schmidt. Jan 14, 1939. In German.	1.50
553-565 PB L 73615	Experiments to purify hydrogen catalytically (220-230 atm). By Schmidt. Aug 15, 1938. In German.	1.50
566-568 PB L 73615	Malic acid and maleic acid. Jun 16, 1938. In German.	1.50
569-583 PB L 73615	Catalyst tubes providing resistance to gas flow. By Huttner. May 20, 1938. In German.	1.50
584-633 PB L 73615	Technical separation of phthalic anhydride and benzoic acid. By Kaupp and Huttner. May 1, 1938. In German.	5.00
634-666 PB L 73615	Yield determination in the production of phthalic anhydride and benzoic acid on the basis of the furnace gas-analysis. By Huttner. Apr 1, 1938. In German.	3.50
667-698 PB L 73615	Utilization of measurement results of tensions of high-boiling organic substances. By Huttner and Kaupp. Mar 15, 1938. In German.	3.50
699-712 PB L 73615	Continuous production of dithionite according to the amalgam process in the presence of zinc. By Dehnert. Feb 9, 1938. In German.	1.50
713-730 PB L 73615	Experimental report on the catalytic production of N-alkylated amines. By Götz. Jan 21, 1938. In German.	2.00
731-740 PB L 73615	Catalytic oxidation of crotonaldehyde to maleic acid. Part II. (Part I: reports dated Mar 25, 1931 and Oct 3, 1933 are not available). By Drossbach. Nov 23, 1936. In German.	1.50
741-746 PB L 73615	A new method for the production of maleic anhydride from maleic acid. By Schnell. Oct 15, 1936. In German.	1.50
747-762 PB L 73615	Purification of crude phthalic acid by distillation and partial crystallization. By Schnell. Jun 19, 1936. In German.	2.00
763-788 PB L 73615	Quantitative carbon balances with some catalytic oxidation processes. Derivation of heat of reaction therefrom. By Huttner. Oct 31, 1935. In German.	3.00
789-803 PB L 73615	"Tanigan DL." By Guthke. Feb 15, 1934. In German.	1.50

PB L 73615-S. I.G. FARBENINDUSTRIE A.G., LUDWIGSHAFEN, GERMANY. Organic preparations. (FIAT Microfilm Reel M 103, Frames 496-803, abstract cards) 1934-1940. 33 p. Price: Microfilm-$1.00 - Photostat-$3.00
Brief abstracts of the individual items on the above reel M 103, PB 73615, prepared by FIAT personnel in Germany.

PB L 73591. I.G. FARBENINDUSTRIE A.G., LUDWIGSHAFEN, GERMANY. Organic preparations and tanning agents. (FIAT Microfilm Reel M 104, Frames 804-1085). 1930-1943. 281 f. Price: Microfilm-$3.75 - Enlargement Print-$28.50.
This reel was prepared by FIAT investigators in Germany. 21 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $3.75. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
804 - 810 PB L 73591	Experiments for improving "Tanigan D". By Fischer. Feb 22, 1935. In German.	$1.50
811 - 817 PB L 73591	Improvement on "Tanigan Supra DLN". By Guthke. Jan 20, 1937. In German.	1.50
818 - 826 PB L 73591	Experiments to improve "Tanigan D" and "Tanigan DX" (Tanigan Extra D). By Guthke. Jan 27, 1937. In German.	1.50
827 - 910 PB L 73591	Experiments in the Tanigan laboratory in 1937. Present state of tanning practice. By Guthke. 1937. In German.	8.50
911 - 914 PB L 73591	Production of triphenylchloromethane. By Guthke. Sep 12, 1930. In German.	1.50
915 - 919 PB L 73591	Experiments to chlorinate toluene in the gas phase. By Guthke. Feb 9, 1931. In German.	1.50
920 - 928 PB L 73591	Production of pentaerythrite. By Aellen. Mar 10, 1931. In German.	1.50
929 - 933 PB L 73591	Diffusion measurements on dyes. Vat dyes and "Peregal O". By Valko. Dec 6, 1934. In German.	1.50
934 - 948 PB L 73591	Spontaneous combustion of organic substances. By Drossbach. Mar 11, 1936. In German.	1.50
949 - 969 PB L 73591	Process for the continuous production of hexamethylenetetramine. By Fischer. Aug 19, 1936. In German.	2.50
970 - 976 PB L 73591	Grinding tests on phenylbetanaphthylamine. By Briehe and Risser. Feb 23, 1937. In German.	1.50
977 - 991 PB L 73591	Investigation of gallic acid from various firms and the production of gallic acid by means of the soda-lye method (gallic acid N). By Mute. Feb 3, 1932. In German.	1.50
992 - 998 PB L 73591	Process for producing trimethyl phenyl ammonium methyl sulfate. By Kleproth. Jun 18, 1938. In German.	1.50
999 - 1018 PB L 73591	Chlorination of tetrahydrofuran. By Aurnhammer.. Jul 20, 1942. In German.	2.00
1019 - 1022 PB L 73591	Production method for tetrahydrofuran. By Bergdoll. Jun 12, 1943. In German.	1.50

1023 - 1026 PB L 73591 **The technical discontinuous production of hexamethylenetetramine.** By Schmidt, and others. Apr 18, 1940. In German. 1.50

1027 - 1031 PB L 73591 **Comparison of the two adipic acid production methods.** By Fischer. Feb 13, 1940. In German. 1.50

1032 - 1042 PB L 73591 **Laboratory tests for making adipic acid from cyclohexanone.** By Fingberg and Fischer. Nov 20, 1941. In German. 1.50

1043 - 1078 PB L 73591 **The mechanism of the oxidation of cyclic compounds by nitric acid to dicarboxylic acid (adipic acid and succinic acid).** By Heinze. May 15, 1942. In German. 4.00

1079 - 1085 PB L 73591 **Provisional report concerning adipic acid dinitrile tests.** Dec 1943. By Guthke. Dec 21, 1943. In German. 1.50

PB L 73591-S. I.G. FARBENINDUSTRIE A.G. LUDWIGSHAFEN, GERMANY. **Organic preparations and tanning agents.** (FIAT Microfilm Reel M 104, Frames 804-1085, abstract cards). 1930-1943. 31 p. Price: Microfilm-$1.00 - Photostat-$3.00.
Brief abstracts of the individual items on the above reel M 104, PB 73591, prepared by FIAT personnel in Germany.

PB L 73850. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. **Reports dealing with chemicals and related subjects.** (FIAT Microfilm Reel M-94, Frames 4018-4842). 1936-1938. 824 f. Price: Microfilm-$6.00 - Enlargement print-$82.50.
This reel was prepared by FIAT investigators in Germany. 76 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
4018-4028 PB L 73850	**Possibilities of producing bromine, which are of technical interest.** By Herbert Wolf I. Apr 20, 1936. In German.	$1.50
4029-4034 PB L 73850	**Atomiser for pyrite dust.** By Büttner. Apr 21, 1936. In German.	1.50
4035-4044 PB L 73850	**Preparation of sodium sulfide in connection with the electrolysis of sodium chloride.** By K. Winteroberger. Apr 23, 1936. In German.	1.50
4045-4049 PB L 73850	**Determination of the permeability of diaphragms.** By H. Büttgenbach. Apr 23, 1936. In German.	1.50
4050-4058 PB L 73850	**Chlorination of berite.** By R. Pätsch. May 11, 1936. In German.	1.50
4059-4079 PB L 73850	**Thorough roasting of the Wiesloch zinc blende in the dust furnace.** By A. Imsel. May 15, 1936. In German.	2.50
4080-4100 PB L 73850	**Sulfuryl chloride tar. IG-adhesive for increasing the adhesiveness of bituminous materials to stones, etc.** By F. Spoun. May 16, 1936. In German.	2.50
4101-4107 PB L 73850	**Removal of sodium chlorate from the anodic liquid in the electrolysis of sodium chloride.** By H. Büttgenbach. Jun 22, 1936. In German.	1.50
4108-4125 PB L 73850	**Incrustation of the vanadium-catalyst in the sulfur trioxide catalysis.** By W. Pfannmüller. Jul 20, 1936. In German.	3.00
4126-4182 PB L 73850	**Production of technically pure sulfur dioxide from roasting gases by absorption under pressure.** By H. Wolf I. Jul 25, 1936. In German.	6.00
4183-4209 PB L 73850	**Preparation of hydrazine.** By L. Löbbecke. Jul 27, 1936. In German.	3.00
4210-4214 PB L 73850	**Retesting the properties of "Aberon."** By R. Löbbecke. Aug 3, 1936. In German.	1.50
4215-4219 PB L 73850	**The bromine content of some German mineral waters and their mother liquors.** By H. Wolf I. Aug 18, 1936. In German.	1.50
4220-4230 PB L 73850	**The production of technically pure sulfur dioxide from roasting gases containing carbon dioxide according to the pressure absorption process.** By H. Wolf I. Aug 20, 1936. In German.	1.50
4231-4238 PB L 73850	**Preparation of hyposulfites from zinc amalgam and sulfurous acid or bisulfites.** By R. Löbbecke. Aug 18, 1936. In German.	1.50
4239-4267 PB L 73850	**Information on the rock salt dissolving process of the Ludwigshafen II chlorine factory.** By H. Büttgenbach. Oct 2, 1936. In German. Laboratory retesting of purification methods for rock salt solutions for sodium chloride electrolysis.	3.00
4268-4278 PB L 73850	**Experiments with iron tanning agents.** By W. Böhm. Oct 8, 1936. In German.	1.50
4279-4301 PB L 73850	**Production of sulfur from sulfur dioxide.** By H. Dohse. Dec 1, 1936. In German.	2.50
4302-4314 PB L 73850	**Elimination of small quantities of hydrogen from chlorine by means of silent electric discharges.** By H. Pätsch. Jan 11, 1937. In German.	1.50
4315-4330 PB L 73850	**Production of high per cent sodium cyanide.** By K. Winteroberger. Jan 18, 1937. In German.	2.00
4331-4344 PB L 73850	**Drying experiments of "Blancorol Al" in a "Buflovac"-Molecular-Spraying Installation.** By W. Böhm. Jan 20, 1937. In German.	1.50
4345-4362 PB L 73850	**Some informative experiments on the absorption of sulfur dioxide from roasting gases in aqueous salt solutions.** By H. Wolf I. Mar 3, 1937. In German.	2.00
4363-4379 PB L 73850	**Production of hydrogen chloride from chlorine, steam and coal.** By Johannsen. Mar 5, 1937. In German.	2.00
4380-4401 PB L 73850	**Experiences in the production and further processing of "Mipor substance" for diaphragm purposes.** By H. Büttgenbach. Mar 10, 1937. In German.	2.50

4402-4433 PB L 73850 — Further development of the application of adhesives for improvement of the properties of bituminous substances. By F. Spoun. Mar 24, 1937. In German. 3.50

4434-4440 PB L 73850 — "Corrosiveness of "Alkazid" solutions." By K. Wintersberger. Mar 25, 1937. In German. 1.50
Reducing the corrosiveness of "Alkazid" solutions, potassium salt of methylaldazine.

4441-4450 PB L 73850 — Iron and aluminum tanning agents. By Werner Böhm. 1937. In German. 1.50

4451-4458 PB L 73850 — Preparation of sodium sulfide over sodium amalgam. By K. Wintersberger. 1937. In German. 1.50

4459-4467 PB L 73850 — Production of high percentage sodium cyanide. By K. Wintersberger. 1937. In German. 1.50

4468-4475 PB L 73850 — Bromine and waste solutions. By Herbert Wolf I. 1937. In German. 1.50

4476-4488 PB L 73850 — Sulfur from sulfur dioxide. By Herbert Wolf I. 1937. In German. 1.50

4489-4511 PB L 73850 — State of acetylene black investigations as of 1937. By Fritz Spoun. 1937. In German. 2.50

4512-4517 PB L 73850 — Purifying rock salt brine with phosphate as filling agent. By K. Dittgenbach. 1937. In German. 1.50

4518-4525 PB L 73850 — Tests concerned with decoking agents of chicory coffee. By W. Haufe. 1937. In German. 1.50

4526-4533 PB L 73850 — Detection of $Ca^{\cdot}$ and $Mg^{\cdot\cdot}$ in saturated salt brine. By K. Dittgenbach. 1937. In German. 1.50

4534-4539 PB L 73850 — Tests with regard to the production of SO_2 by absorption. By Walfried Haufe. 1937. In German. 1.50

4540-4543 PB L 73850 — Analysis of alkali polysulfides. By Karl Wintersberger. 1937. In German. 1.50

4544-4562 PB L 73850 — Production of sodium thiosulfate from amalgam solution, sulfur and gases containing sulfur dioxide. By Fritz Spoun. 1937. In German. 2.00

4563-4580 PB L 73850 — Carbon disulfide production from pyrite and coal. By Wilhelm Eckardt. 1937. In German. 2.00

4581-4593 PB L 73850 — Influence of brine impurities on the operation of Hg-cells. By K. Dittgenbach. 1937. In German. 1.50

4594-4602 PB L 73850 — New adhesive agents from the plants at Uerdingen and Ludwigshafen. By Fritz Spoun. 1937. In German. 1.50

4603-4616 PB L 73850 — Production of basic aluminum compounds. By W. Haufe. 1937. In German. 1.50

4617-4627 PB L 73850 — Tests for the manufacture of preservative polishing agents. By Spoun. 1937. In German. 1.50

4628-4639 PB L 73850 — Separation of hydrogen chloride-sulfur dioxide mixtures. By Eckardt. 1937. In German. 1.50

4640-4657 PB L 73850 — Production of zinc hyposulfite from zinc amalgam and sulfurdioxide. By R. Lüdemann. 1937. In German. 2.00

4658-4664 PB L 73850 — Detection of $Al^{\cdot\cdot\cdot}$ in saturated rock salt bring. By K. Dittgenbach. 1937. In German. 1.50

4665-4681 PB L 73850 — Stirring tests with a cylinder of 200 cu. m. volume in a salt-dissolving process. By K. Dittgenbach. 1937. In German. 2.00

4682-4696 PB L 73850 — Removal of hydrogen in chlorine gas. By Baudrexler. 1937. In German. 1.50

4697-4706 PB L 73850 — Dehydrogenation tests of crystallized sodium sulfide in a vacuum. By W. Just. 1937. In German. 1.50

4707-4714 PB L 73850 — Production of zinc dust by thermal means. By W. Just. 1937. In German. 1.50

4715-4724 PB L 73850 — Tests for producing elementary sulfur from roasting gas. By W. Just. 1937. In German. 1.50

4725-4731 PB L 73850 — Preparation of tungsten hexachloride from metallic tungsten and chlorine. By H. Baudrexler. 1937. In German. 1.50

4732-4737 PB L 73850 — Specific detectability of $Mg^{\cdot\cdot}$ and $Ca^{\cdot\cdot}$ in saturated rock salt bring. By Erich Dittgenbach. 1937. In German. 1.50

4738-4743 PB L 73850 — Production of nitric acid and sulfuric acid from ammonium sulfate. By Pätsch. 1937. In German. 1.50

4744-4750 PB L 73850 — Crystallization of primary sodium-o-phosphate solutions. By W. Haufe. 1937. In German. 1.50

4751-4754 PB L 73850 — Recovery of mercury from acetaldehyde-contact acid. By W. Dans. 1937. In German. 1.50

4755-4760 PB L 73850 — The thermal behavior of copper mercury iodide. By G. Bauermeister. 1938. In German. 1.50

4761-4765 PB L 73850 — Processing of aluminum chloride solutions. By W. Dans. 1938. In German. 1.50

4766-4774 PB L 73850 — Tests for the production of aluminum chloride. By W. Müller. 1938. In German. 1.50

4775-4780 PB L 73850 — Preparation of zinc dust by cementation with aluminum. By H. Platz. 1938. In German. 1.50

4781-4805 PB L 73850 — Electrolytic production of zinc dust. By R. Lüdemann. 1938. In German. 2.50

4806-4821 PB L 73850 — Inorganic tanning agents particularly for Ludwigshafen projects. By Böhm. 1938. In German. 2.00

4822-4826 PB L 73850 — Tests for the purification of calcium hydroxide from carbide furnaces. By W. Spormann. 1938. In German. 1.50

4829-4835 PB L 73850 — Corrosion of metals in solutions of basic aluminum salts. By Danz. 1938. In German. 1.50

4836-4842 PB L 73850 — Electrolysis of aqueous aluminum chloride solutions and processing of aluminum chloride solutions. By Werner Bühn. 1938. In German. 1.50

PB L 73594. I.G. FARBENINDUSTRIE A.G., OPPAU, GERMANY. Reports of the Ammonia Laboratory. (FIAT Microfilm Reel R 19, Frames 6489-7509). 1937-1944. 1020 f. Price: Microfilm-$6.00 - Enlargement Prints-$102.00
This microfilm reel was prepared by FIAT investigators in Germany. 59 individual items are listed below and will be available as enlargement prints. The entire reel may be obtained as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel.

Frames	Title	Price
6489 - 6496 PB L 73594	Chlorination of methane at high temperatures according to Dr. Flemming. A method for the technical production of methyl chloride and methylene chloride. By Riegelbauer. Oct 30, 1939. In German.	$1.50
6497 - 6512 PB L 73594	Chain length of fatty acids in the fat of goats which were fed with synthetic fat. By Schiller. Feb 15, 1940. In German.	2.00
6513 - 6519 PB L 73594	Analysis recorder for ethylene oxide. By Schaffernak. Mar 16, 1940. In German.	1.50
6529 - 6532 PB L 73594	The determination of phosphorus, sulfur, and arsenic compounds in acetylene. By Hieke and Grassner. Feb 28, 1940. In German.	1.50
6533 - 6566 PB L 73594	Analysis of the fatty acids for soaps made from "Riebeck"-paraffin and "Fischer-Catsch". By Weiss and Haase. May 6, 1940. In German.	3.50
6567 - 6577 PB L 73594	The cracking of gas oil. By Rudolf Seidler. Apr 12, 1940. In German.	1.50
6578 - 6587 PB L 73594	The formation of films from phosphoric acid and metal oxides. By S. Mohr. May 10, 1940. In German.	1.50
6588 - 6595 PB L 73594	Increasing the effect preventing blood coagulation by aliphatic hydroxycarboxylic acids and multivalent alcohols. By Brandeis. Jun 27, 1940. In German.	1.50
6596 - 6613 PB L 73594	Urea as fodder for livestock. By Claren. Jul 8, 1940. In German.	2.00
6614 - 6629 PB L 73594	Examination of the adsorption of synthetic detergents on thin celluloid foils by means of electron diffraction. By Rieder. Jun 28, 1940. In German.	2.00
6630 - 6645 PB L 73594	Comparative determination of the particle sizes of carbon blacks used in rubber by means of X-rays and electron-rays. By Herbst and Rieder. Jul 4, 1940. In German.	2.00
6646 - 6656 PB L 73594	Alcoholysis of lignin. By Funke. Jul 29, 1940. In German.	1.50
6657 - 6667 PB L 73594	Determination of the content of normal paraffins in gasolines, middle oils, and paraffins. By Leithe. Aug 2, 1940. In German.	1.50
6668 - 6685 PB L 73594	Analysis of fatty acids for soaps from "T.H." - paraffin. By Haase. Aug 8, 1940. In German.	2.00
6686 - 6699 PB L 73594	Preparation of butadiene from acetylene and ethane. By Rud. Seidler. Jun 24, 1940. In German.	1.50
6700 - 6722 PB L 73594	The odor of soaps from paraffin-oxidation. By Leithe. Jan 30, 1939. In German.	2.50
6723 - 6740 PB L 73594	Determination of the amount of iso-paraffin in natural and synthetic soft and hard paraffins. By Leithe. May 13, 1939. In German.	2.00
6741 - 6751 PB L 73594	Conversion of methane with steam and carbon dioxide into carbon monoxide and hydrogen. By Knobloch. Sep 5, 1940. In German.	1.50
6752 - 6764 PB L 73594	Pressure tests for the production of paraffin from carbon monoxide and hydrogen according to the Fischer method. By Kotzschmar. Jan 2, 1939. In German.	1.50
6765 - 6820 PB L 73594	The determination of physical data for polymer gasoline plants. By Hagen. Dec 10, 1937. In German.	6.00
6821 - 6846 PB L 73594	Fats of fatty acids with an odd number of carbon atoms. By Appel and others. Feb 3, 1940. In German.	3.00
6847 - 6860 PB L 73594	Production of 2,3-dichloro-1,4-dioxan and glycol. By Lintner. Feb 16, 1939. In German.	1.50
6861 - 6870 PB L 73594	Conversion of methane to carbon monoxide and hydrogen. By Knobloch. Oct 2, 1940. In German.	1.50
6871 - 6884 PB L 73594	Reaction products of 2,3-dichlorodioxan. By Lintner. Jun 25, 1940. In German.	1.50
6885 - 6893 PB L 73594	Determination of the position of double bonds in olefins. By Leithe and Eder. Oct 22, 1940. In German.	1.50
6894 - 6900 PB L 73594	Physiology and toxicology of synthetic fat. By Keil. Nov 19, 1940. In German.	1.50
6901 - 6909 PB L 73594	The behavior of fed formic acid in the digestive tract of the ruminant. By Claren. Feb 8, 1941. In German.	1.50
6910 - 6936 PB L 73594	Behavior of polyamides at elevated temperature. By R. Brill. Feb 26, 1941. In German.	3.00
6937 - 6944 PB L 73594	Separation of dicarboxylic acids and monocarboxylic acids based on their different dissociation. By Abrahamczic. Mar 18, 1941. In German.	1.50

6945 - 6954
PB L 73594
Reaction of methane with steam under pressure. By Knobloch. Mar 11, 1941. In German. 1.50

6955 - 6977
PB L 73594
Alkylation products from isobutane with butenes or propylene. By Hümmel. Apr 15, 1941. In German. 2.50

6978 - 7012
PB L 73594
Some new results from the ammonia catalyst. By Brill and Peters. Apr 15, 1941. In German. 3.50

7013 - 7017
PB L 73594
Determination of the bromine number in gasolines and other olefine-containing substances. By Klein. May 22, 1941. In German. 1.50

7018 - 7034
PB L 73594
Production of allylamine from allyl mustard oil. By Stade. May 21, 1941. In German. 2.00

7035 - 7047
PB L 73594
Tests for producing aliphatic bis-diazo paraffins. By Hummel. May 28, 1941. In German. 1.50

7048 - 7058
PB L 73594
X-ray examination of disintegrated buna. By Herbst. May 15, 1941 In German. 1.50

7059 - 7067
PB L 73594
Alkali-soluble aldehyde resins. By G. Rösler. May 19, 1941. In German. 1.50

7068 - 7075
PB L 73594
X-ray examination of some polyethylene products. By Herbst. Sep 4, 1941. In German. 1.50

7076 - 7087
PB L 73594
X-ray examination of the action of methylamine on cellulose. By Brill. Jul 30, 1941. In German. 1.50

7088 - 7104
PB L 73594
Behavior of calcium in the ammonia catalyst towards poisoning. By Brill and Peters. Oct 16, 1941. In German. 2.00

7105 - 7124
PB L 73594
The reaction speed of carbon monoxide on the "brown-oxide" catalyst under increased pressures. By Bartholomé. Nov 26, 1941. In German. 2.00

7125 - 7135
PB L 73594
Examinations of the structure of thin films from polyamides by means of electron diffraction. By Brill and Rieder. May 1941. In German. 1.50

7136 - 7147
PB L 73594
Temperature resistance of a new hexagonal iron carbide in catalysts for the hydrocarbon synthesis according to F.Fischer. By W. Herbst. Jan 13, 1942. In German. 1.50

7148 - 7159
PB L 73594
Determination of water in lower fatty acids and their mixtures. By Müller and Grassner. Jan 24, 1942. In German. 1.50

7160 - 7173
PB L 73594
Proof and constitution of branched acids from the Fischer-Catsch fatty acids for soaps. By Malan and Weiss. Feb 14, 1942. In German. 1.50

7174 - 7184
PB L 73594
Preparation of carboxylic acids by adding derivatives of formic acid on olefinic double bonds. By Stade. Mar 25, 1942. In German. 1.50

7185 - 7205
PB L 73594
Nitration of propane and some reaction products of the nitroalkanes. By E. Finck. May 4, 1942. In German. 2.50

7206 - 7220
PB L 73594
Examination of crystalline inclusions in "Igamid" die-casting material. By M. Herbst. Dec 28, 1942. In German. 1.50

7221 - 7234
PB L 73594
X-ray examinations for explaining the crystalline structure of the triphenylmethane dyes. By Krebs. Jun 21, 1943. In German. 1.50

7235 - 7266
PB L 73594
The action of admixtures in the ammonia catalyst as stabilizers against thermal sintering and as poison catchers. By Peters. Feb 21, 1944. In German. 3.50

7267 - 7302
PB L 73594
Influence of admixtures in the ammonia catalyst on the number and the energy-level of the active centers. By Peters. Feb 16, 1944. In German. 4.00

7303 - 7354
PB L 73594
Isomerization of n-butane with aluminum chloride catalysts. By Vogel. May 9, 1942, Jul 28, 1943. In German. 5.50

7355 - 7370
PB L 73594
Determination of olefines and aromatic substances in hydrocarbon mixtures. By Schlenk. Apr 7, 1941. In German. 2.00

7371 - 7420
PB L 73594
Examination and evaluation of starting materials for the synthesis of paraffin-lubricating oil. By Baumeister. Oct 6, 1941. In German. 5.00

7421 - 7432
PB L 73594
Determination of the reactivity of cokes. By Grassner. Jan 6, 1942. In German. 1.50

7433 - 7440
PB L 73594
Determination of very small quantities of phosphorus in oils and gasolines. By Grassner. Jun 13, 1942. In German. 1.50

7441 - 7465
PB L 73594
The refraction-density number as a value for the classification of hydrocarbons in gasolines. By Rud. Seidler. May 26, 1942. In German. 2.50

7466 - 7488
PB L 73594
The determination of the content of aromatic substances, naphthenes and paraffins in gasolines. By Leithe. Oct 19, 1942. In German. 2.50

7489 - 7509
PB L 73594
Alkylation of isobutane with dehydrogenation mixtures from isobutane or n-butane. By Hümmel. Oct 28, 1943. In German. 2.50

PB L 73594-S. I.G. FARBENINDUSTRIE, A.G., OPPAU, GERMANY. Reports of the Ammonia Laboratory. (FIAT Microfilm Reel R 19, Frames 6489-7509, abstract cards). 1937-1944. 60 p. Price: Microfilm-$2.00 - Photostat-$4.00. These are abstract cards for the individual items on the above FIAT microfilm reel R 19, PB 73594, prepared by FIAT personnel in Germany.

PB L 86312. MCCRACKEN, WILLIAM L. and MCKINLEY, H. B. Trichlorethylene and mono-vinyl chloride processes at plant

of Dr. Alexander Wacker, Gesellschaft fur Elektrochemische Industrie, G.m.b.H., Burghausen. Oct 1947. 557 p. Price: Microfilm-$7.00 - Photostat-$56.00
The accompanying reports appear in the following order: (1) purification and drying of acetylene, (2) manufacture of tetrachlorethane by the reaction of acetylene with chlorine, (3) production of trichlorethylene by the cleavage of tetrachlorethane, (4) production of trichlorethylene by the treatment of tetrachlorethane with lime, and (5) production of mono-vinyl chloride from acetylene and hydrogen chloride gas produced in the tetrachlorethane cleavage process. It is believed that the accompanying reports and drawings give information in sufficient detail to allow any good process engineer to design, install and operate the trichlorethylene and mono-vinyl chloride processes as they are installed at the Alexander Wacker Plant in Burghausen.

PB L 85433. MACRAE, DUNCAN. Adsorption and azeotrope formation. n. d. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00
Summary: It has been suggested that Ewell, Harricon, and Berg's classification of liquids to predict the interaction of liquid molecules to form azeotropes, be broadened to include other electron pair acceptors than hydrogen and that adsorbing surfaces be correspondingly classified and the two classifications be used in an experimental determination of the acid-base character of adsorbing surfaces. It has been further suggested that in consideration of chemisorption due attention be paid to the covalent, metallic, and ionic nature of the chemical bonds involved. Army Chemical Center, Maryland.

PB L 85752. MAERCKLIN, W. Problems in the development of foam extinguishing practice in the petroleum industry. (Bound with The evaluation of foams for fighting petroleum conflagrations, by O. Amsel). (Science Translation Service Rept 29). Dec 1946. 75 p. Price: Microfilm-$2.75 - Photostat-$8.00
The heat resistance, fluidity, and foam factor of fire-extinguishing foams have been investigated in the laboratory by means of suitable devices. The results thus found have been combined into a so-called foam index, which arranges the foams tested in the same order with respect to their extinguishing ability as do burning tests conducted in a tank 3 m. (9.85 ft.) in diameter. The order thus obtained agrees with that found in earlier large-scale fire tests on a tank 18 m. (60 ft.) in diameter. From the foam consumptions and extinguishing times measured in these tests, the amount of foam and time required to extinguish a burning 18 m. (60 ft.) tank can therefore be pre-computed, within certain limits, for any foam agent by using the corresponding foam index; in this process air foam and chemical foam are treated differently for the same foam index. Photographs, tables and graphs are attached.

PB L 86222. MANUFACTURE of acetylene and acetone starting with methane. (Information collected from Dr. Kosbahn). n. d. 15 p. Price: Microfilm-$1.25 - Photostat-$2.00
The general plan of manufacture is given.

PB L 85735. MEYER, BERTRAM J. and KAREL, LEONARD. The effects of iodides, l-thiosorbitol, and twenty-five other compounds on alphanaphthylthiourea (ANTU) toxicity in rats. n. d. 33 p. Price: Microfilm-$1.75 - Photostat-$4.00
Of twenty-five compounds tested only potassium iodide and l-thiosorbitol were unequivocally successful in preventing the lethal pulmonary edema and pleural effusion caused by the administration of ANTU to albino rats of the Wistar strain. Methods and experimental details followed by a discussion and summary are given in the report.

PB L 86220. REPORT of the mission of Mr. Dol in Ludwigshafen, Mar. 1947.: Manufacture of formol starting with methanol, by Dr. Kording and Dr. Gerloff. (Enclosed with Diverse notes on the conversion of methane by oxygen (workshop 631)). Mar 1947. 23 p. Price: Microfilm-$1.50 - Photostat-$3.00
The manufacture of formol is given together with a schematic sketch of a 100 tons per day capacity of 30% formol. Attached are notes on the conversion of methane by oxygen. French translation.

PB L 86218. REPORT of work accomplished by D.I.C. Mission No. 561. May 1947. 25 p. Price: Microfilm-$1.50 - Photostat-$3.00
The factories visitied dealt with the natural clay for the purpose of preparing either activated bleaching earths or bentonite colloidal clays. The technical information on the manufacture consisted of the preparation of (a) the standard tonsil activated earth, (b) tixoton colloidal clay, (c) "Teg" alumina hydroxide, (d) the bleaching earth into small granosil grains. The production capacity and description of the mine are given. Translation from the French.

PB L 86217. REPORT on the visit to the Degussa factory, Constance. May 1947. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
A translation from French in which is given Dr. Schuls's report on the preparation of (a) Lamepone, a product which offers an excellent lixiviating and penetrating power, does absolutely no damage to the fibre, and may be applied even in a slightly acid state. In the wool industry it replaces the much more expensive fatty sulfonated alcohols; (b) Peptical, a neutral pharmacoutical cream for skin penetration prepared from the waste products of bone glue; (c) Weichmacher T 46; and (d) manufacture of formol.

PB L 73570. REPORTS on the production of synthetic mica and the production of synthetic rubber. (FIAT Microfilm Reel AA 64, Frames 1-96). 1940 - 1945. 96 f. Price: Microfilm-$1.75 - Enlargement Print-$10.00.
This FIAT microfilm reel consists of eight individual reports, the first report dealing with the production of synthetic mica and the remainder dealing with synthetic rubber. All the reports are in English; All but two are definitely translations from the German; and the other two also appear to be translations. The individual reports are listed below and will be available as enlargement prints. Please include PB and frame numbers when ordering individual items from this microfilm reel.

Frames	Title	Price
1 - 41 PB L 73570	Investigations on the synthesis of fluorine-mica of the Phlogopite group. By W. Eitel and others. 1941-1945.	$4.50
42 - 45 PB L 73570	High pressure polymerization of synthetic rubber. By Becker. 1942.	1.50
46 - 53 PB L 73570	Latex research with the ultracentrifuge and the electron microscope. By Wolf. 1942.	1.50
54 - 61 PB L 73570	Quick polymerization with mepasin sulfinate. By Logemann. Jun 1944.	1.50
62 - 77 PB L 73570	Present status of the new butadiene process. By W. Reppe. 1940.	2.00
78 - 80 PB L 73570	Iron salts as decomposition catalysts. By Wiesemann. Jan 1945.	1.50
81 - 88 PB L 73570	Research made to increase the rate of Buna-S polymerization. By Logemann. Jul 1943.	1.50

89 - 96
PB L 73570 Morpolate action during emulsion polymerization in the presence of reducing agents. By Logemann. Jan 1944. 1.50

PB L 73570-S. REPORTS on the production of synthetic mica and the production of synthetic rubber. (FIAT Microfilm Reel AA 64, Frames 1-96, abstract cards). 1940-1945. 13 p. Price: Microfilm-$1.00 - Photostat-$1.00.
Brief abstracts are presented of the individual items of microfilm reel AA 64 (PB 73570), listed above. The abstracts were prepared by FIAT personnel in Germany.

PB L 85651. SCHOLLIG. Synthesis of 4-chlorobutene-1 from allylcarbinol. Jul 1942. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
Various methods of deriving 4-chlorobutene-1 were investigated. Since allylcarbinol is available as a by-product of butadiene production, it was tested as a starting material. Reaction of allylcarbinol with hydrochloric acid gave unsatisfactory results. Best yields were obtained by reacting allylcarbinol with thionylchloride. Treatment of 4-chlorobutene-1 with a methanol solution of caustic potash yielded butadiene of high purity. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 70388. WACKER, ALEXANDER, G.M.B.H., MUNICH / BAYERN, GERMANY. Laboratory reports dealing with various organic preparations. (FIAT Microfilm Reel K-111, Frames 1683-2390). 1933 - 1943. 907 f. Price: Microfilm-$6.00 - Enlargement Print-$91.00.
This reel was prepared by FIAT investigators in Germany. 107 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1683 - 1690 PB L 70388	Experiments for the preparation of ethyl malonic acid from butyranilide and carbon dioxide or from butyramide and carbon dioxide. By Ha. n.d. In German.	$1.50
1691 - 1692 PB L 70388	The preparation of finely distributed copper oxychloride. By Schwaebel. Nov 2, 1933. In German.	1.50
1693 - 1723 PB L 70388	Experiments for the preparation glycolic acid. By H. Deger. Nov 8, 1933 and Jan 20, 1934. In German.	3.50
1724 - 1727 PB L 70388	Preparation of oxalic diethylester. By Deger. Nov 13, 1933. In German.	1.50
1728 - 1739 PB L 70388	Preparation of sodium polysulfide as plant protective agent. By Schwaebel. Dec 28, 1933. In German.	1.50
1740 - 1741 PB L 70388	Preparation of mono ethyl malonic ester. By Ha. Dec 30, 1933. In German.	1.50
1742 - 1750 PB L 70388	Removal of the alcohol from acetic ester "B". By Unterguggenberger. Nov 15, 1934. In German.	1.50
1751 - 1761 PB L 70388	Experiments for the preparation of octatrienal. By Deger. Feb 15, 1934. In German.	1.50
1762 - 1771 PB L 70388	Preparation of malonic diethylester from oxal-acetic-diethyl-ester. By Unterguggenberger. Nov 15, 1934. In German.	1.50
1772 - 1775 PB L 70388	Note on the construction of the diethyl-barbituric acid plant. By Hg. Nov 26, 1934. In German.	1.50
1776 - 1779 PB L 70388	Preparation of isopropyl chloride from isopropyl alcohol. By v.Grubers- Mar 6, 1934. In German.	1.50
1780 - 1790 PB L 70388	Experiments for the preparation of alpha ethyl hexanol sulfonic acid. By Schmitz. Mar 9, 1934. In German.	1.50
1791 - 1792 PB L 70388	Preparation of copper dust "Wacker 33" in the Burghausen plant 18 April 1934. By Schwaebel. Apr 27, 1934. In German.	1.50
1793 - 1794 PB L 70388	Note on the examination of an imbedding material. By Schwaebel. Mar 10, 1934. In German.	1.50
1795 - 1802 PB L 70388	Preparation of sodium methylate from caustic soda and methanol. By Schwaebel. May 2, 1934. In German.	1.50
1803 PB L 70388	Test results of paints containing stainless steel powder as pigment. By Kfm. May 18, 1934. In German.	1.50
1804 - 1826 PB L 70388	Experiments for the preparation of salts of antimony glycolic acid and aluminum glycolic acid. By Deger. Jun 1, 1934. In German.	2.50
1827 - 1838 PB L 70388	Reactions with magnesium ethylate. By Heckmaier. Jun 26, 1934. In German.	1.50
1839 - 1842 PB L 70388	Comparative tests of acetyl ricinoleic methyl- and butyl ester as to their applicability. By Kfm. Jun 5, 1934. In German.	1.50
1843 - 1849 PB L 70388	Condensation of oxalic-diethyl ester with acetic ethyl ester to ketipic-diethyl ester. By Unterguggenberger. Jul 4, 1934. In German.	1.50
1850 - 1851 PB L 70388	Competitive copper preparations. By Schwaebel. Jul 11, 1934. In German.	1.50
1852 - 1857 PB L 70388	Experiments for the addition of acetylene on acetic ester. By Heckmaier. Aug 20, 1934. In German.	1.50
1858 - 1859 PB L 70388	Experiments for the preparation of sodium acetylene from acetylene and sodium ethylate. By Heckmaier. Aug 20, 1934. In German.	1.50
1860 - 1892 PB L 70388	Preparation of n-valeric acid. By Heckmaier. Aug 21, 1934 and Oct 2, 1934. In German.	3.50
1893 - 1902 PB L 70388	Formation of isobutylbenzene. By Heckmaier. Sep 25, 1934. In German.	1.50
1903 - 1928 PB L 70388	Action of zinc chloride on acetic anhydride. By Deger. Oct 4, 1934. In German.	3.00

1929 - 1932 PB L 70388 — Report on several reaction experiments with sodium methylate. By A. Wunderer. Oct 10, 1934. In German. 1.50

1933 - 1935 PB L 70388 — Report on the research of the Munich laboratory in October 1934. By Kaufmann. Nov 6, 1934. In German. 1.50

1936 - 1941 PB L 70388 — Report on experiments for the preparation of ethylene-diamine. By Anton Wuderer. Oct 22, 1934. In German. 1.50

1942 - 1947 PB L 70388 — The reaction of carbon tetrachloride with sodium ethylate. By Unterguggenberger. Nov 14, 1934. In German. 1.50

1948 - 1961 PB L 70388 — Action of formic acid on multivalent alcohols. By Heckmaier. Dec 4, 1934. In German. 1.50

1962 - 1979 PB L 70388 — The liquefaction of coal tar by means of gasoline. By Schmitz. Dec 12, 1934. In German. 2.00

1980 - 1986 PB L 70388 — Continuous preparation of sodium methylate (Supplement to report No. 1695, frame numbers 1795-1802) By Schwaebel. Jan 18, 1935. In German. 1.50

1987 - 1997 PB L 70388 — The preparation of octadecyl and "Loryl"-chloride. By Unterguggenberger. Mar 18, 1935. In German. 1.50

1998 - 1999 PB L 70388 — Method for the oxidation of sorbic acid methyl ketone by means of NaOCl. By Schmitz. Jan 30, 1935. In German. 1.50

2000 - 2013 PB L 70388 — Lowering the viscosity of gasoline solutions of natural asphalt. By Schmitz. Feb 18, 1935. In German. 1.50

2014 - 2015 PB L 70388 — Dehydration of leather and hides with "Per". By v. Gruber-Hohenburg. Mar 5, 1935. In German. 1.50

2016 - 2019 PB L 70388 — Experiments for the preparation of methyl ketone from fatty acids of high molecular weight by means of the Grignard solution. By Heckmaier. Mar 7, 1935. In German. 1.50

2020 - 2038 PB L 70388 — Preparation of alpha hydroxy-stearic acid. By Heckmaier. Mar 8, 1935. In German. 2.00

2039 - 2047 PB L 70388 — Report on the acetylation of saccharose to octaacetyl saccharose. By Unterguggenberger. Mar 15, 1935. In German. 1.50

2048 - 2050 PB L 70388 — Fumigation experiments with dichlorosthylene (See report Dr. Kaufler No. 1822 and Dr. Schwaebel No. 1171). By Schwaebel. Jun 5, 1935. In German. 1.50

2051 - 2059 PB L 70388 — Examination of the ethal residue. By Unterguggenberger. Jul 22, 1935. In German. 1.50

2060 - 2093 PB L 70388 — Report on experiments for the preparation of hydracetylacetone. By Deger. Aug 23, 1935. In German. 3.50

2094 - 2106 PB L 70388 — Report on the action of ammonia on unsaturated aldehydes. By Deger. Aug 28, 1935. In German. 1.50

2107 - 2110 PB L 70388 — Report on the dehydrating effect of Raney nickel catalyst on acetaldehyde. By Deger. Aug 30, 1935. In German. 1.50

2111 - 2114 PB L 70388 — Report on the condensation of fatty acid ethyl ester with acetoacetic ester. By Deger. Aug 30, 1935. In German. 1.50

2115 - 2138 PB L 70388 — Report on the preparation of oximines from unsaturated ketones. By Heckmaier. Sep 5, 1935. In German. 2.50

2139 - 2156 PB L 70388 — Condensation products from diacetone alcamine and alkyl halides. By Heckmaier. Sep 6, 1935. In German. 2.00

2157 - 2162 PB L 70388 — Distillation of mixtures of acetic ether, benzene and water for the recovery of acetic ether - benzene. By Unterguggenberger. Oct 18, 1935. In German. 1.50

2163 - 2173 PB L 70388 — Report of a business trip to Switzerland. By Schmitz. Oct 5, 1935. In German. 1.50

2174 - 2181 PB L 70388 — Preparation of hexyl-chloride and experiments for its reaction with sodium acetylene. By Heckmaier. Nov 4, 1935. In German. 1.50

2182 - 2186 PB L 70388 — Use of "Signal crude sublimate" (Technochaltz) for the preparation of organic-magnesium compounds. By Heckmaier. Nov 6, 1935. In German. 1.50

2187 - 2193 PB L 70388 — Report on the preparation of glycolic butyl ester. By Schwaebel. Nov 6, 1935. In German. 1.50

2194 - 2203 PB L 70388 — Report on a business trip to Berlin 11 - 14 December 1935. By Schmitz. Dec 17, 1935. In German. 1.50

2204 - 2207 PB L 70388 — Production of methylpentanediol on a large scale. By Schwaebel. Dec 19, 1935. In German. 1.50

2208 - 2221 PB L 70388 — Experiments for the synthesis of methanol. By Heckmaier. Feb 3, 1936. In German. 1.50

2222 - 2230 PB L 70388 — By-products derived in the preparation of methoxy-butyraldehyde. By Heckmaier. Aug 11, 1936. In German. 1.50

2231 - 2240 PB L 70388 — Hydrogenation of aldol and diacetone alcohol in the gaseous phase at reduced pressure. By Heckmaier. Aug 5, 1936. In German. 1.50

2241 - 2242 PB L 70388 — Report on the analysis of alcoholates. By Schwaebel. Sep 9, 1936. In German. 1.50

2243 - 2244 PB L 70388 — Bordeaux mixture complaint. By Schwaebel. Sep 14, 1936. In German. 1.50

2245 - 2247 PB L 70388 — Report on the preparation of sodium methylate from caustic soda and methanol (see frame No 1980-1986). By Schwaebel. Sep 21, 1936. In German. 1.50

Miscellaneous Chemicals (contd)

2248 - 2256 PB L 70388 — Report on several distilling experiments in order to increase the concentration of 80 - 90 % acetic acid. By Deger. Oct 16, 1936. In German. 1.50

2257 - 2260 PB L 70388 — Experiments for the preparation of sodium oxide. By Sch. Oct 20, 1936. In German. 1.50

2261 - 2282 PB L 70388 — Report on experiments for the preparation of acetoacetic ester derivatives. By Deger. Nov 4, 1936. In German. 2.50

2283 - 2296 PB L 70388 — Preparation of dialkoxy-beta-glycols. By Heckmaier. Dec 28, 1936. In German. 1.50

2297 - 2305 PB L 70388 — The condensation of methoxy-butyraldehyde with formaldehyde. (The preparation of 1,1,1-trihydroxy methylene-2-methoxy-propane). By Heckmaier. Dec 29, 1936. In German. 1.50

2306 - 2316 PB L 70388 — Action of ammonia on crotonaldehyde. By Heckmaier. Dec 30, 1936. In German. 1.50

2317 - 2322 PB L 70388 — Preparation of oxides of potassium (sodium or mixed potassium sodium oxide). By v. Gruber-Rehenburg. Jan 13, 1937. In German. 1.50

2323 - 2330 PB L 70388 — Manufacture of porous molded articles from "Vinnapas" and Wacker's artificial shellac. By Sch Jan 27, 1937. In German. 1.50

2331 - 2332 PB L 70388 — Low-boiling impurity in trichloroethylene. By v. Gruber-Rehenburg. Mar 17, 1937. In German. 1.50

2333 - 2334 PB L 70388 — Note on the use of dichloroethylene (low-boiling) for the fumigation of rooms. By Schwaebel. Jul 4, 1937. In German. 1.50

2335 - 2340 PB L 70388 — Report on acetoxy-butadiene (continuation of report No. 2076). By Kaufler. Jun 15, 1937. In German. 1.50

2341 - 2343 PB L 70388 — Hydrogenation of acetoxybutadiene. By Schwaebel. Jun 18, 1937. In German. 1.50

2344 - 2349 PB L 70388 — Report on experiments as to the adhesiveness of various artificial shellac types of the Wacker firm. By Unterguggenberger. Jul 8, 1937. In German. 1.50

2350 - 2354 PB L 70388 — Report on tests of substances for destroying peronospora spores (hops). By Schwaebel. Jun 12, 1937. In German. 1.50

2355 - 2369 PB L 70388 — Report on experiments for improving the yield and methods of separation for acetoxy-butadiene. By Strobel. Jun 13, 1937. In German. 1.50

2370 - 2373 PB L 70388 — Solubility of "Tri" (trichloroethylene) in water at different temperatures. By Grubers-Rehanburg. Jul 20, 1937. In German. 1.50

2374 - 2380 PB L 70388 — Report on the dispersion of sulfur; report on the use of sulfur as plant protective. By Schwaebel. Sep 8, 1937. In German. 1.50

2381 - 2385 PB L 70388 — Report on the hydrogenation of the chlorine derivatives of acetylene by means of Raney-nickel. By Schwaebel. Sep 15, 1937. In German. 1.50

2386 - 2401 PB L 70388 — Manufacture of lead-saving pigments. By Sch. Oct 6, 1937. In German. 2.00

2402 - 2408 PB L 70388 — Experiments to explain the great losses of acetic anhydride during the production of acetoxy butadiene. By Ernst Strobel. Oct 25, 1937. In German. 1.50

2409 - 2410 PB L 70388 — Report on the production of finely-dispersed sulfur on a large scale. By Schwaebel. Oct 30, 1937. In German. 1.50

2411 - 2417 PB L 70388 — Experiments for the condensation of caprealdehyde with resorcin. Special experiments in order to intercept the intermediates formed before the solid body. By Strobel. Jan 6, 1938. In German. 1.50

2418 - 2426 PB L 70388 — Experiments for the preparation of a softening agent for acetyl cellulose. By K. Mar 22, 1938. In German. 1.50

2427 - 2429 PB L 70388 — Examination of polishing-red samples. By Schwaebel. May 6, 1938. In German. 1.50

2430 - 2434 PB L 70388 — Reaction of alcohols on ammonium chloride. By K. May 10, 1938. In German. 1.50

2435 - 2436 PB L 70388 — Report on experiments for increasing the solidity of plaster moldings by admixing "Vinnapas"-emulsions during the manufacture. By Sch. Mar 30, 1938. In German. 1.50

2437 - 2442 PB L 70388 — Report on the condensation of butyric butyl ester. By K. Jun 30, 1938. In German. 1.50

2443 - 2449 PB L 70388 — Report on the preparation of crotyl alcohol (J.Americ.chem.Soc. 58,100-102,Jan.1936). By Gehring. Sep 15, 1938. In German. 1.50

2450 - 2452 PB L 70388 — Memorandum on the miscibility of sulfur lye with other plant protectives. By Schwaebel. Nov 17, 1938. In German. 1.50

2453- 2454 PB L 70388 — Report on a quantitative detection of acrylic polymers in the presence of "Vinnapas" polymers in emulsions. By Strobel. Dec 6, 1938. In German. 1.50

2455 - 2457 PB L 70388 — Report on the studies of the Munich laboratory in February 1939. By Schwaebel. Mar 1, 1939. In German. 1.50

2458 - 2461 PB L 70388 — Report on aldol condensations. By Strobel. Mar 27, 1939. In German. 1.50

2462 - 2475 PB L 70388 — Report on the preparation of alpha chloroacrylic ester from trichloroethylene and formaldehyde. By Unterguggenberger. Jan 14, 1941. In German. 1.50

2476 - 2504 PB L 70388 — Report on general properties of "Vinnol h/40" and application

	possibilities in the lacquer industry. By Unterguggenberger. Jan 15, 1941. In German.	3.00
2505 - 2509 PB L 70388	Note concerning the constitution and properties of thialdine. Jun 24, 1941. In German.	1.50
2510 - 2514 PB L 70388	Preparation of the "triacetate from triethylbenzene". By Schwäbel. May 8, 1942. In German.	1.50
2515 - 2519 PB L 70388	Report on experiments for the preparation of "W 83" at Burghausen from 28 April to 1 May 1942. By Schwäbel. May 7, 1942. In German.	1.50
2520 - 2523 PB L 70388	Report on the use of "W 83" for the cultivation of wine and fruits in the Frankfurt district 1941. By Schwäbel. Sep 16, 1941. In German.	1.50
2524 - 2525 PB L 70388	Note concerning "Cuprenox". By Schwäbel. Sep 2, 1941. In German.	1.50
2526 - 2535 PB L 70388	Monthly laboratory report of the department "S"/ January 1943. By Fe. Feb 10, 1943. In German.	1.50
2536 - 2539 PB L 70388	Monthly report on the acetylene plant / February 1943. By Schw. Mar 12, 1943. In German.	1.50
2540 - 2542 PB L 70388	Laboratory report of the department "S"/February 1943. Monthly report of the "Tripen" experimental plant for February 1943. By Fe. Mar 16, 1943. In German.	1.50
2543 - 2551 PB L 70388	Laboratory experiments of the department "R", group "RE" for February 1943. (Report on the preparation of hydracetyl acetone and its hydrogenation. Comparative tests with a BaO-Cu-Chromite catalyst. By Kamler. Mar 30, 1943. In German.	1.50
2552 - 2555 PB L 70388	Production of ethylidene chloride from vinyl chloride and hydrogen chloride. By Schaeffer. Apr 9, 1943. In German.	1.50
2556 - 2581 PB L 70388	Report of the laboratory 11/(January/March 1943). By Krug. Apr 22, 1943. In German.	3.00
2582 - 2590 PB L 70388	Report of the Zelose Laboratory (Monthly reports January-March 1943. May 3, 1943. In German.	1.50

PB L 70388-S. WACKER, ALEXANDER, G.M.B.H., MUNICH / BAYERN, GERMANY. Laboratory reports dealing with various organic preparations. (FIAT Microfilm Reel K-111, Frames 1583-2590, abstract cards). 1933 - 1943. 113 p.
Price: Microfilm-$3.00 - Photostat-$8.00.
Brief abstracts of the individual items on the above reel K 111, PB 70388, prepared by FIAT personnel in Germany.

PB L 70481. WACKER, ALEXANDER, G.M.B.H., MUNICH, GERMANY. Reports dealing with organic preparations. (FIAT Microfilm Reel K 109, Frames 1-820) 1928-1929. 820 f.
Price: Microfilm-$6.00 - Enlargement Print-$82.00.
This reel was prepared by FIAT investigators in Germany. 45 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1-8 PB L 70481	Index of products. By A. Wacker. Sep 25, 1946. In German.	$1.50
9-342 PB L 70481	Summary of reports. By A. Wacker. Sep 25, 1946. In German.	33.50
343 PB L 70481	Trichloroethylene for bed feather cleaning. Report No. 1066. By A. Wacker. Jan 13, 1928. In German.	1.50
344-379 PB L 70481	Chlorination of crotonaldehyde in an aqueous solution. By H. Anselm. Mar 15, 1928. In German.	4.00
380-385 PB L 70481	Esterification of formic acid with butyl alcohol without a catalyst. By Kaufmann. Feb 8, 1928. In German.	1.50
386-391 PB L 70481	Esterification of chloroacetic acid with butyl alcohol without a catalyst. By A. Wacker. Apr 8, 1928. In German.	1.50
392-441 PB L 70481	Condensation of dibutyl oxalate with butyl acetate by means of sodium butylate. Report No. 1076. By H. Anselm. Mar 13, 1928. In German.	5.00
442-450 PB L 70481	Preparation of oxalacetic ester. By Stangler and Wacker. Mar 6, 1928. In German.	1.50
451-459 PB L 70481	Preparation of acetoacetic butyl ester ("Butal"). By Halbig and Wacker. Apr 5, 1928. In German.	1.50
460-477 PB L 70481	Preparation of copper oxide. By Schwaebel and Wacker. Jun 15, 1928. In German.	2.00
478-549 PB L 70481	Preparation of oxalaconitic ester from oxalacetic ester. By Stangler and Wacker. Jun 2, 1928. In German.	7.50
550-578 PB L 70481	Method for the quantitative determination of halogenhydrocarbon vapors in the air. By Gruber and Wacker. May 9, 1928. In German.	3.00
579-607 PB L 70481	Preparation of ethyl chloride from ethyl alcohol and diluted hydrochloric acid. By Schwäbel and Wacker. Jul 6, 1928. In German.	3.00
608-609 PB L 70481	Visit to Siemens-Schuckert G.m.b.H., Nürnberg July 6, 1928, because of a complaint regarding shipment of trichloroethylene. By Stöbe and Wacker. Jul 7, 1928. In German.	1.50
610-618 PB L 70481	Determination of the dilution capability of solvents. Report No. 1116. By Kaufmann and Wacker. Jul 14, 1928. In German.	1.50
619-621 PB L 70481	Preparation of butyl stearate. Report No. 1122. By Halbig and Wacker. Aug 7, 1928. In German.	1.50
622 PB L 70481	Use of Solvent O in lacquers containing castor oil. By Kaufmann and Wacker. Aug 11, 1928. In German.	1.50
623-626 PB L 70481	Purity test of acetoacetic butyl ester (Butal). By Halbig and Wacker. Aug 13, 1928. In German.	1.50

627-630 PB L 70481 — Synthesis of dibutyl malonate from dibutyl carbonate and butyl acetate. By Halbig and Wacker. Aug 21, 1928. In German. 1.50

631-634 PB L 70481 — Spraying tests with Wacker lime in hop fields. By A. Wacker. Aug 29, 1928. In German. 1.50

635-639 PB L 70481 — Potassium acetate from potassium carbonate and acetic acid. Report No. 1128. By Schwaebel and Wacker. Aug 31, 1928. In German. 1.50

640-641 PB L 70481 — Rubber solutions in dichloroethylene. Report No. 1134. By Kaufmann and Wacker. Oct 1, 1928. In German. 1.50

642-644 PB L 70481 — Putty for fastening glass stones to an iron base. By v. Gruber and Wacker. Oct 16, 1928. In German. 1.50

645-652 PB L 70481 — Preparation of sodium ethoxide and acetoacetic ethyl ester. Report No. 1139. By Halbig and Wacker. Oct 24, 1928. In German. 1.50

653-654 PB L 70481 — Determining the heat of dilution of acetone in water. By v. Gruber. Nov 2, 1928. In German. 1.50

655-668 PB L 70481 — Absorption of acetone vapor from air. Report No. 1142. By Kaufmann and Wacker. Oct 31, 1928. In German. 1.50

669-685 PB L 70481 — Preparation of diacetone alcohol. Report No. 1149. By Stangler and Wacker. Dec 21, 1928. In German. 2.00

686 PB L 70481 — The suitability of ethylene chloride for the preparation of rubber solutions. Report No. 1151. By Kaufmann and Wacker. Jan 3, 1929. In German. 1.50

687 PB L 70481 — Dye for coloring trichloroethylene. By Kaufmann and Wacker. Jan 3, 1929. In German. 1.50

688-698 PB L 70481 — Insecticides. Report No. 1152. By Schwaebel and Wacker. Jan 10, 1929. In German. 1.50

699-705 PB L 70481 — Sodium hydroxide and solvents. Report No. 1153. By Kaufmann and Wacker. Jan 17, 1929. In German. 1.50

706-709 PB L 70481 — Investigations in the Munich laboratory of Dr. Alexander Wacker, January 1929. Report No. 1158. By Kaufmann and Wacker. Feb 4, 1929. In German. 1.50

710-714 PB L 70481 — Oxidation of crotonaldehyde to crotonic acid. By Halbig and Wacker. Feb 8, 1929. In German. 1.50

715-716 PB L 70481 — Chloride of lime for the disinfection of soil. By Schwaebel and Wacker. Feb 12, 1929. In German. 1.50

717-720 PB L 70481 — Determination of the solubility of sodium chloride (and potassium chloride) in 45-50% sodium hydroxide solutions. Report No. 1161. By v. Gruber and Wacker. Mar 25, 1929. In German. 1.50

721-722 PB L 70481 — Preparation of n-butyl chloride from n-butyl alcohol. By v. Gruber and Wacker. Mar 25, 1929. In German. 1.50

723-726 PB L 70481 — Preparation of n-butylamine from butyl chloride and ammonia. By v. Gruber and Wacker. Mar 25, 1929. In German. 1.50

727-731 PB L 70481 — Protective measures in the atomization of di- and tri-chlorethylene mixtures. Report No. 1171a. By Schwaebel and Wacker. Mar 7, 1929. In German. 1.50

732-741 PB L 70481 — Di- and trichloroethylene mixtures as atomizing agents. Report No. 1171. By Schwaebel and Wacker. Apr 9, 1929. In German. 1.50

742-746 PB L 70481 — Energy balance of a carbide furnace. Report No. 1174a. By A. Wacker. Apr 26, 1929. In German. 1.50

747-749 PB L 70481 — Production of a copper containing dusting agent "Copper Lime Wacker". Report No. 1180. By Schwaebel and Wacker. Aug 13, 1929. In German. 1.50

750-752 PB L 70481 — Purity test for acetoacetic butyl ester. Report No. 1180a. By Halbig and Wacker. May 22, 1928. In German. 1.50

753-769 PB L 70481 — Production of a catalyst for the condensation of acetaldehyde to acetic ester. Report No. 1187. By Stangler and Wacker. Jun 7, 1929. In German. 3.00

770-813 PB L 70481 — Preparation of butter-like edible fats by reesterification of other edible fats or esterification of neutral fats. Report No. 1188a. By Päufer and Wacker. Aug 23, 1928, May 14, 1929. In German. 4.50

814-820 PB L 70481 — Experiments on catalysts for the "Tischtschenko" reaction. Report No. 1189. By Stangler and Wacker. Jun 15, 1929. In German. 1.50

PB L 70481-S. WACKER, ALEXANDER, G.M.B.H., MUNICH, GERMANY. Reports dealing with organic preparations. (FIAT Microfilm Reel K 109, Frames 1-820, abstract cards) 1928-1929. 43 p. Price: Microfilm-$1.00 - Photostat-$3.00
Brief abstracts of individual items on the above reel K 109, PB 70481, prepared by FIAT personnel in Germany.

PB L 87700-PB L 87701. WASEDA ŌYŌ KAGAKKAI (WASEDA APPLIED CHEMICAL SOCIETY), TOKYO. Bulletin. v. 18, Nos. 1-4; v. 19, Nos. 1-3. 1941-1943. Paging and prices as follows:

PB	Vol.	Nos.	Date	Pages	Prices Micro.	Photo.
L 87700	18	1-4	1941-1942	178	$5.25	$18.00
L 87701	19	1-3	1942-1943	115	3.75	12.00

These documents are volume groupings of a Japanese technical journal on current chemical research. The Bulletin is printed in Japanese. The Bulletin ordinarily also includes a foreign language section in English and/or German entitled "Abstracts of Original Papers." This section, however, is sometimes omitted.

Electronics

PB L 87375. ALEXANDER, P. Industrial applications of ultrasonics: Researches carried out at Siemens-Schuckert-werke, Berlin. (BIOS Final Rept 1504, Item 21, 22). Sep 1946. 31 p. Price: Microfilm-$1.75 - Photostat-$4.00

This report presents general details of the production of ultrasonics and some miscellaneous applications. All information presented was obtained from Siemens-Schuckert. Fundamentally there is nothing new in any of their methods of producing ultrasonics. Some of the miscellaneous applications reported are entirely novel and may be of potential industrial value. The general scheme of the researches reported was priced together from memory by interviews thus the report is necessarily very incomplete and may well be incorrect on some points. Drawings and photographs are attached.

PB L 85538. ARCHER, G. W. Improved preamplifier mounting for OAY sound level meter hydrophone. (Columbia Univ Div of War Res Rept P35/R679). Jan 1944. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00

This memorandum for file describes improvements in the mounting of the RQ-51055 (AX58) hydrophone preamplifier assembly which is used with the OAY sound level meter and how they may be incorporated into those units that have already been put into service. A drawing of the unit is included.

PB L 85531. ARCHER, G. W. Use of type 6A8 tube in ML-115 supersonic converter. (Columbia Univ Div of War Res Rept P35/R673). Dec 1943. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

This memorandum covers the reason for the use of type 6A8 pentagrid converter, a non-approved tube in preference to the type 6SA7 approved tube for use in the ML-115 supersonic converter.

PB L 87768. BLODGETT, E.D. AND LAKATOS, L.L. Ultra high frequency direction finding study.Final report. (OSRD Rept 4285). Jul 1944. 99 p. Price: Microfilm-$3.25 - Photostat-$10.00.

A comprehensive investigation of two general types of directive arrays, for use in the VHF and UHF bands (150-600mc/s), was carried out in this project, with emphasis on factors of importance in direction finding. The two types were selected on the basis of comparisons between arrays in use on direction finders, and other arrays used in certain closely related applications. The first type uses two arrays of identical directivity, associated with two reflectors, the latter being placed at an angle so as to displace in azimuth the response pattern of one with respect to the other. Amplitude comparison of the outputs of the two arrays enables the bearing of an arriving signal to be determined at the equi-signal point. Two systems of this general type were studied, one having a single dipole placed before each reflector; the second, two dipoles referred to hereinafter as the V-1 and V-2 arrays respectively. Both were found capable of satisfactory direction finding, however, the first is subject to higher polarization errors. When amplitude comparison is made by means of a differential connection between the two arrays and the resulting null then used for bearing indication, the polarization errors of both the V-1 and V-2 are low. The second type considered (Flat array) is an array mounted before a flat screen, with lobe displacement accomplished electrically. This type was found satisfactory with one exception. At the upper end of the frequency range covered, it is possible to obtain two false bearing indications, one on either side of the true bearing. These may, however, be readily distinguished either in manual operation, or with oscilloscopic indicators They may be troublesome when automatic tracking is used. It is considered that further development on this type may remove this difficulty. The relative merits of the V and Flat arrays are, briefly, that the V is more uniform in performance but is larger in size; the impedance characteristics of the Flat array are exceptionally good for the wide frequency range covered, but the component electrical elements must be more carefully chosen. Certain related subjects were investigated in the course of the work. A satisfactory transformer for converting from a balanced to an unbalanced system was designed. A recently proposed method for evaluating polarization errors was put in use, and was found to be superior to other available methods. A new method was developed for the measurement of the electrical constants of ground. Impedance characteristics of cylindrical dipoles of large transverse dimensions were studied. The differentially connected V array was found to have certain advantages over the conventional elevated H Adcock. Work done under Contract OEMsr-1009 by Radio Corporation of America, Camden, N.J.

PB L 81201. CALLEN, R. J. Recent circuit changes in the components of the Mark II serial 2A echo ranging rack. (Columbia Univ Div of War Res Rept D20/R548). Oct 1943. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00

This file memorandum describes several circuit changes made in the D 20 Mark II serial 2A Rack prior to its installation on board the USS SARDONYX. Two diagrams are included.

PB L 81351. CHAPMAN, ROBERT Y. Installation of topside sonic listening equipment on "P" class submarines. (Columbia Univ Div of War Res Rept D2L/R232). Apr 1943. 18 p. Price: Microfilm-$1.25 - Photostat-$2.00

This is a résumé on conferences concerning the installation and certain changes that were made for this equipment. Photographs and diagrams are attached.

PB L 87758. CLARK, TREVOR H. Influence of ground conductivity on accuracy of MLS-505 direction finder. (OSRD Rept 1936). Dec 1943. 21 p. Price: Microfilm-$1.50 - Photostat-$3.00.

This memorandum gives the results of practical tests of an operating direction finder using spaced vertical monopoles connected by transmission lines of the horizontal U type. In this system, each monopole base is connected to a small ground mat which is buried close to the surface of the soil. A short description is given of the theory underlying this design and the results of two typical installations are given. The causes of the inferior results of the second of these installations are analysed. The means adopted for their correction are given. The results of the correcting means are further analysed and general conclusions useful for the selection of sites and the installation of such direction finders are enumerated. Work done by Research laboratories, Federal Telephone and Radio Corporation.

PB L 86877. COBINE, J. D. and CURRY, J. R. Electrical noise generators. (General Electric Res Lab Rept 1443). Sep 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

This article is a reprint from "Proceedings of the Institute of Radio Engineers, vol. 35, No. 9, September 1947." A new noise source consisting of a gas tube in a transverse magnetic field has been developed. Characteristics of the noise source are presented, together with some consideration of the problems in the amplification of noise. Typical noise-amplifier circuits are given for frequency bandwidth from 0.1 to 2.5 and 5 megacycles, respectively. Illustration and graphs are included. This work was done in whole or in part under Contract OEMsr-411 between the President and Fellows of Harvard College and the Office of Scientific Research and Development.

PB L 86878. COBINE, J. D. and others. High-frequency excitation of iron cores. (General Electric Res Lab Rept 1043). Oct 1947. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00

This is a reprint from "Proceedings of the Institute of Radio Engineers, vol. 35, No. 10, October 1947." The object of this research was to make a thorough study of the electrical properties of iron-core coils, such as are used in transformers, at frequencies up to 5 megacycles for both sine-wave and random noise excitation. Techniques for studying these properties are described, using both high-frequency sine-wave and wide-band random noise excitation. Materials investigated include hipersil, nonimax, molybdenum permalloy, and B9W-4A. Diagrams, charts, and illustrations are included. This work was done in whole or in part under Contract OEMsr-411 between the President and Fellows of Harvard College and the Office of Scientific Research and Development.

PB L 87228. CUNNINGHAM, W. J. and others. The influence of amplitude limiting and frequency selectivity upon the performance of radio receivers in noise. (Harvard Univ Psycho-Acoustic Lab Psycho Navy Res Rept 15). Oct 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00.

This paper describes an experimental study of the relations which exist between the effectiveness of voice communication, measured in terms of the intelligibility of received speech, and the amplitude- and frequency-selective characteristics of amplitude-modulation receivers. The results lead to the following conclusions: 1. Amplitude limiters are ineffective against fluctuation noise. Against impulse noise, however, they provide marked improvement in performance if they are incorporated in receivers with appropriate selectivity characteristics. 2. When no limiter is used, best performance in the presence either of fluctuation noise or of impulse noise is provided by narrow-band circuits, but the advantage of narrow-band circuits over wide-band circuits is small. 3. When a limiter is used, best performance against fluctuation noise is again provided by narrow-band circuits, and again the advantage of narrow-band circuits over broad-band circuits is small. For optimal reception in the presence of impulse noise, however, the selectivity curve of the circuits preceding the limiter must have gradually sloping skirts. When a limiter is used, therefore, advantage rests with broad-band rather than with narrow-band circuits. Reprinted from the Proceedings of the Institute of Radio Engineers, Oct 1947.

PB L 81053. HANSON, R. O. The General Electric model 20 N wire recorder. (Columbia Univ Div War Res Memo P37/R809). Mar 1944. 13 p. Price: Microfilm-$1.00-Photostat-$1.00

At the request of the BuAer, work was done by the New London Laboratory on the General Electric Model 20 N Magnetic Wire Recorder to improve its frequency response. Some nine changes are listed and explained. After all the changes had been made in the machines a testing procedure was applied. This testing procedure is described in this file memorandum. Two photographs, curves, and diagrams are included.

PB L 81052. HANSON, R. O. Magnetic wire recorders: General Electric model 20A, Armour research model 50. (Columbia Univ Div War Res Memo P37/R656). Dec 1943. 11 p. Price: Microfilm-$1.00 - Photostat-$1.00

At the request of BuAero, tests were made by the New London Laboratory on the General Electric Model 20 A and the Armour Research Model 50 Magnetic Wire Recorder. This file memorandum gives a detailed description of the two recorders followed by data on comparison between the two models. Frequency in cycles per second for both models and a circuit diagram for Model 50 are included.

PB L 81047. HANSON, R. O. Record processing at the New London laboratory. (Columbia Univ Div War Res Memo P37/R1272). Dec 1944. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00

Coincident with the beginning of recording at the laboratory of Columbia University came the problem of obtaining satisfactory pressings for distribution. A number of plants doing this type of work were visited with the idea of selecting the one best able to furnish pressings commensurate in quality with the original records. As a result of this survey the Muzak plant in New York City was chosen. This file memorandum gives the principal factors leading to this choice as well as an outline of typical methods of operation at the Muzak plant.

PB L 81049. HANSON, R. O. and WATKINS, W. B. Recordograph film recorder. (Columbia Univ Div War Res Memo P37/R1233). Nov 1943. 3 p. Price: Microfilm-$1.00. Photostat-$1.00

This memorandum describes a sound recorder, known as the "Commando" model "A" recordograph, manufactured by Amertype Recordograph Corporation. It is contained in a compact, portable, black carrying case 9½" x 13 1/8" x 18½". The complete unit weighs fifty pounds, and is equipped with one Shure Brothers Crystal Microphone, one set Brush Crystal headphone, one remote control motor switch, one needle wrench, and one set of Allen wrenches. Figure 1 of the curve sheet shows the overall response of the recorder, amplifier and reproducer. Figure 2 on the same curve sheet shows the response of the amplifier alone when terminated alternately in the recorder head and speaker voice coil.

PB L 81051. HANSON, R. O. Suggestions for a hi-fidelity phonograph playback suitable for reproducing recordings of underwater sound. (Columbia Univ Div War Res Memo P37/R1015). Jul 1944. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

Overall response from 100 to 8,000 cycles should not vary more than plus or minus 4db. as measured using RCA test record T-248A-1. This record has a 500 cycle crossover frequency. In order to reproduce this record properly a producing equalizer which effectively raises the low frequency spectrum starting at 500 cycles would have to be included. This memorandum further describes the requirements for the: Reproducer; Turntable; Amplifier; and Speaker.

PB L 86015. HEATH, W., JR. Production test method: Ignition radio interference evaluation. (Wright Aeronautical Corp Rept 1016). Oct 1945. 32 p. Price: Microfilm-$1.75 - Photostat-$4.00

The object was to develop a suitable method for checking in production the ignition radio shielding characteristics of aircraft engines. This report describes a suitable production test for detecting radio interference with the use of the Wright Aeronautical Corporation integrating antenna and excitation of the ignition system by external means. This method provides a better over-all picture of the ignition shielding condition than testing in accordance with specification AN-I-27 and, in addition, provides the simplicity and speed desired of an inspection test. Diagrams, charts, sketches, and photographs are included.

PB L 85539. HERRNFELD, FRANK P. Distortion tests by intermodulation method. (Columbia Univ Div of War Res Rept P35/R712). Mar 1944. 13 p. Price: Microfilm-$1.25 - Photostat-$2.00

this memorandum for file describes the intermodulation method of distortion tests. This method can be compared with the dynamic check of vacuum tubes, as overall single frequency distortion measurements compare with the static check of vacuum tubes. Schematic circuit diagrams are included.

PB L 86118. HUNT, F. V. Electronic automatic search. Completion report. Dec 1947. 19 p. Price: Microfilm-$1.25 - Photostat-$2.00
Electronic Automatic Search (EAS) comprises a system of electronic circuits that can be employed to operate a ship's sonar gear automatically during the search period in accordance with a previously determined pattern. The report lists the requirements it was felt the EAS equipment should meet and describes in detail the construction and operation of the gear. Also included are a history of the project, performance specifications, and a list of parts for the device. The work was carried on by the Harvard Underwater Sound Laboratory under OSRD Contract OEMsr-287 and its amendments.

PB L 85956. LEHMANN, H. W. Electromagnetic probes. (Detroit Signal Lab Assignment Memo D-313-E-F-45). May 1945. 16 p. Price: Microfilm-$1.25 - Photostat-$2.00
The object of this investigation was to develop suitable probes to expedite the isolation of ignition, generator, and other types of radio interferences emanating from engine generators; to equip existing engine-generator suppression testing equipment, LM-10, with probes; and to train pilot crew personnel in the operation of the probe in conjunction with SMD-1 procedure. This assignment was activated inasmuch as existing commercial probes do not possess the desired degree of sensitivity and are not uniformly directional. A chart, photographs, and drawings are included.

PB L 87225. LICKLIDER, J. C. R. and GOFFARD, S. J. Effects of impulsive interference upon A-M voice communication. (Harvard Univ Psycho-Acoustic Lab Psycho Navy Res Rept 32) Jul 1947. 11 p. Price: Microfilm-$1.25 - Photostat-$2.00
The degree to which noise impairs the intelligibility of speech depends upon the characteristics of the noise. In this paper, which is concerned with electrical interference and radio communication, the questions are:(1)"what characteristics of the noise determine the degree of impairment," and (2)"what are the functional relations between intelligibility and the important characteristics of the noise?" Ansers to these questions were obtained with the aid of a articulation tests, conducted with a typical amplitude-modulation system and with a variety of electrical interferences. Reprinted from the Journal of the Acoustical Society of America, July 1947.

PB L 87769. LUCK, D.G.C. and MORTON, L.E. Further study of errors in high-frequency direction finders. Final report. (OSRD Rept 908). Aug 1942. 75 p. Price: Microfilm-$2.75.- Photostat-$8.00.
The work here reported is essentially a continuation of that done under Project C-17. Review of high-angle measuring methods indicates balloons still to be the best elevating agent, but has led to redesign of working rigging. Purity of polarization of the test transmitter used in both projects has been measured and found to be exceptionally good and quite adequate. Test of a counterpoise of insulated wire rings has shown it to be especially ineffective. Measurement at six frequencies of the stray pickup of the Bell Telephone Laboratories experimental Adcock at Holmdel, for a wide range of wave-arrival elevation, has shown a minimum of unwanted effect at a surprisingly constant elevation, with no corresponding field minimum present. Standard-wave errors computed directly from theobservations range from 2 to 9 degrees over the range 15 to 5 megacycles. No significant voltages could be found across the ground mat of this system. Analysis of the results of Project C-17 has given good correlation of the observations at different elevations. For the Holmdel results, no such correlation has been found; the error minimum consistently observed at an elevation of about 5 degrees has not yet been adequately explained. In this analysis, fields produced at the Adcock system by the local test transmitter have been computed both on plane-wave and on general theory; the latter method has given in most cases a much greater vertical component than the former, especially at low frequencies and elevations. This means that local transmitter tests are generally much too favorable if taken at face value. In the Holmdel case, the standard-wave errors corrected to distant-signal conditions become so great at low frequencies that they are not easy to accept as correct, though we cannot now explain them away. The structure of the elevated-counterpoise Adcock of Project C-17 is generally suitable for transportable use and is quite free from instrumental errors. Recent observation of the rather poor performance of many other systems has led us to improve our opinion of the C-17 system and to lay down rules for the design of such systems. Performed by RCA Research Laboratories, Camden, N. J.

PB L 87771. LUCK, D.G.C. The measurement of errors of radio direction finders. Final report. (OSRD Rept 1653). Mar 1943. 78 p. Price: Microfilm-$2.75 - Photostat-$8.00.
Determination of technical performance of radio direction finders is very important to the user; the problem it presents is analyzed and discussed. Some errors of direction finding are properties of radio signals rather than of apparatus and must be avoided in performance testing. Other errors are strictly internal properties of the apparatus and can be determined in the laboratory. The remaining errors arise in the interaction of signal and apparatus. Some of them, such as multipath wave-interference errors and errors due to nearby objects, are very important but so complex that testing conditions cannot yet be specified. Errors occurring on signals arriving over a single path at a direction finder in clear surroundings can be measured as functions of frequency, polarization, azimuth and elevation of arriving signal. Such measurements require a fully controlled test signal directly simulating typical actual signals: provision of this test signal is the object of this project. The testing instrument is a signal field, made complex by the presence of the ground. Its properties are shown analytically and some of them are discussed. The field of a local source differs from that of a distant signal, so testing is simplified by using distances of at least a few tens of wavelengths. Direction-finder responses to favorably and unfavorably polarized signals may be measured separately and operating errors may be inferred from the results. This method, used in our field work, requires a signal source of very pure polarization. A light, self-contained source built to conform to the shape of a simple electric or magnetic dipole is described. It has been found to have sufficiently pure polarization for some but not all direction-finder testing. A new method of testing is proposed which would employ both favorably and unfavorably polarized signals simultaneously, with continuously varying relative phase. A generator for such a test field is described. The new method would be quick, direct, simple and reliable to use. An aircraft is required to support the transmitter used for direction-finder testing; a tall tower is a very useful auxiliary support. While a dirigible is the ideal supporting craft, a captive balloon is a useful substitute under proper conditions. Performance-testing sites must be most critically chosen for clearness and homogeneity over a very large area and to a sufficient depth. Salt-marsh sites are required to determine ultimate direction-finder performance capability; desert sites are also required to determine possible impairment of ultimate performance. Extension of measurements of the sort described to include multipath and nearby-obstruction errors can be made whenever specification of suitable measuring conditions becomes feasible. Work done under contract OEMsr-838 at RCA Laboratories, Princeton, N.J.

PB L 87770. LUCK, D.G.C. and MORTON, L.E. Polarization errors of shielded U Adcock direction finders. Final report. (OSRD Rept 1884). Jul 1943. 92 p. Price: Microfilm-$3.25 - Photostat-$10.00.
Earlier field calculations are reviewed and the reason for an erroneous result is shown. New field expressions developed to avoid the earlier difficulties are equiva-

lent to simpler forms reported by K. A. Norton, which are here used in new field calculations. Comparative polarization-error tests of an elevated-counterpoise Adcock system with rod and loop test transmitters have given results independent of the type of transmitter and of transmitter distance. Computation of spurious effects due to test-field curvature shows them to be sufficient to limit severely the significance of short-range measurements made on good direction finders with rod transmitters. The elevated-counterpoise Adcock is not good enough to encounter such limitations. It shows quite poor pickup ratios, dependent both on frequency and on test-transmitter elevations. Results of earlier tests on the BTL Adcock at Holmdel are compared with newly computed fields and found to repr e-sent primarily field-curvature effects. Even the error minima at 5-degree transmitter elevation are qualitatively explained. Some high-angle observations permit tentative assignment of standard-wave errors in the neighborhood of 7½ degrees (50%) and of pickup ratios comparable with those of the elevated-counterpoise Adcock. No fully satisfactory measurement has yet been made of the polarization error of any really good direction finder. Only rather long-range, high-elevation tests can remedy this situation.

PB L 87763. LUCK, D.G.C. and NORTON, L.E. Study of a wave collector for semi-portable radio direction finders operating between 2 and 30 megacycles. (OSRD Rept 211) Nov 1941. 20 p. Price: Microfilm-$1.25 - Photostat-$2.00.

A mobile Adcock antenna system for high-frequency use, with demountable counterpoise, was constructed and field tested to determine the counterpoise requirements for accurate operation with downcoming waves. Radial wire counterpoises were found unsatisfactory even with ground waves because of insufficient shielding of antennas from nearby objects. A combination of wire netting and radial wires was satisfactory with ground waves but still showed excessive polarization errors with downcoming waves. RCA Research Laboratories, Camden, N.J.

PB L 87762. LUCK, D..G.C. and NORTON, L.E. Wave collectors for semi-portable radio direction finders for high frequencies. Final report. (OSRD Rept 337). Jan 1942. 78 p. Price: Microfilm-$2.75 - Photostat-$.00.

General review of the properties of radio waves and of known direction-finding wave-collectors indicates that simple loop- or dipole-antenna direction finders are not usefully accurate under normal conditions of high-frequency wave propagation. Wave-collectors consisting of spaced antennas are in principle highly accurate. As very rapid bearing indication is sometimes needed, systems operating without large-scale mechanical motion are preferable. Practical accuracy of spaced-antenna fixed systems is limited by difficulty in keeping all antennas identical and by unwanted pick-up on extraneous conductors, such as lead-ins, essential to the antenna system. The first difficulty must be overcome by careful design, construction and installation. The second can be attacked by balancing unwanted pick-up out of the output from the complete system, through use of highly symmetrical antennas, or it can be attacked by shielding the unwanted conductors from the incoming waves and from the antennas themselves. The first expedient gives rise to H-Adcock, balanced U Adcock and spaced-loop direction finders, all of which have already been given considerable study. The second expedient is that of the shielded-U Adcock, which has never been fully studied as to the nature and extent of shield required to produce sufficiently accurate bearings on sky waves. To make such a study, with respect to semi-portable equipment only, is the purpose of the present project. Performed by RCA Research Laboratories, Camden, N.J.

PB L 87766. LUKE CHINA-LIU TUAN. Ultra high frequency radio-sonde direction finder. (OSRD Rept 1256). Feb 1943. 27 p. Price: Microfilm-$1.50 - Photostat-$3.00.

A simple radio direction finder for observing the flight of meteorological balloons is described. An Adcock antenna and a single dipole antenna system, including a corner-type reflector as shield against ground reflected waves, were used for measuring the azimuthal and the elevation angles, respectively, of the direction of an incoming electromagnetic wave emitted from a transmitter sent aloft on meteorological balloons. A description of the corner-type reflector which was found to effectively shield the antenna used for elevation angle measurements is given, and various curves are presented to show its shielding characteristics at varying wire spacings, focal lengths and wire lengths. Using the direction finder, an accuracy of 1/4° in the determination of the azimuthal angles at various vertical inclinations is obtained. While in the determination of the elevation angles, when using a stationary transmitter as target which was set up on top of Mt. Wilson at a distance of 7 miles away an accuracy of within 1/2° is easily obtained. When the target transmitter is sent aloft on meteorological balloons, the error in the elevation angle observations range from zero to a few degrees. The errors in the elevation measurements were probably caused by the swinging and rotation of the transmitter and transmitting antenna during flights, the deterioration in the efficiency of the shielding responses of the corner reflector due to surface oxidation of the reflector wires under long weather exposures. Goldplating of the reflector wires shows a marked improvement in the shielding efficiency of the reflector system. At the request of the NDRC, the direction finder was sent to the Signal Corps Laboratories at Fort Monmouth for further testing. A brief description of the preliminary tests made at Fort Monmouth is also given. Performed under contract OEMsr-217 at California Institute of Technology, Pasadena, Calif.

PB L 81336. MCMILLAN, EDWIN C. Polyscope electronic switch. Jul 1942. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00

The circuit described in this report is a component of the Polyscope. The function of the Polyscope electronic switch is to connect the outputs of several receiver channels successively to the cathode of a cathode ray tube so that they can be viewed simultaneously on the same screen. It is the electronic equivalent of a rotary switch with the switch points connected to the receiver outputs, and the rotating arm connected to the cathode ray tube. The version described in this memorandum is designed to handle six receiver channels, but it could be built for any number within practical limits. The circuit is shown in four drawings. This work is reported as being under the auspices of the University of California, Division of National Defense Research at the U. S. Navy Radio and Sound Laboratory at San Diego.

PB L 87778. MORTON, G. A. Pick-up tube for reconnaissance television. Final report. (OSRD Rept 1343). Mar 1943. 14 p. Price: Microfilm-$1.25 - Photostat-2.00.

The project was undertaken to determine whether or not a line mosaic tube, built by techniques previously worked out and only requiring slight modification, could be used to obtain the definition required for a reconnaissance television system. The tube employed a slit aperture gun and a line mosaic. The latter consisted of a dielectric sheet having on it a row of fine line elements (600 to the inch). Two types were investigated, one having just line elements insulated from one another, the second having a conducting line between each line element in order to form a barrier grid to prevent electron redistribution. Horizontal deflection of the electron beam across the mosaic was obtained with an external magnetic yoke. To obtain vertical deflection, the optical image is moved at vertical (frame) velocity across a slit arranged to focus a line of the image on the mosaic. Two mosaics of each type were tested in pick-up tubes. None of them gave the required definition. The primary cause of the low resolution was electrical leakage between elements and between the barrier and elements. Where the barrier grid was not used, redistribution of electrons also contributed to loss in resolution. In order to overcome the leakage, a radically different technique would have to be developed for preparing the mosaic. This would require a rather lengthy research program. A similar amount of research could be

more profitably used in developing a tube using a two dimensional mosaic having the required definition. Such a tube would have a much greater inherent sensitivity. A report from RCA laboratories, Princeton, N. J.

PB L 87779. PARKINSON, T. Ionospheric and field intensity measurements at Louisiana State University, Jul 1, 1941 - Jun 30, 1942. (OSRD Rept 715). Jul 1942. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00.
The two projects included in this contract were concerned with the continuous measurement of field intensities of selected radio transmitting stations and the regular recording of ionosphere reflections, respectively. The systems involved in the two projects were essentially those used by the Bureau of Standards for similar work, and the analysis of data has been conducted according to their recommendations. Much of the apparatus utilized had to be purchased and assembled, thus involving delays, which were added to in a number of instances by failure of defective parts and by unanticipated problems. The extremely high static level of this latitude added a serious difficulty and called for special treatment. The major problems of securing satisfactory data have now been solved, field intensity data has been reported regularly for many months, and ionosphere reflections have been recorded regularly for several months but still lack satisfactory calibrating arrangements.

PB L 87772. PARKINSON, T. Ionospheric measurement research at Louisiana State University, Jul. 1, 1942 - Jun. 30, 1943. Final Report. (OSRD Rept 1662). Jul 1943. 6 p. Price: Microfilm-$1.00 - Photostat-1.00.
The work on ionospheric measurements at Louisiana State University during the period of July 1, 1942 to June 30, 1943 was concerned with the two major problems: (1) continuous field intensity measurements of transmissions from four selected broadcast stations and analysis of results; and (2) the securing of regular reflection-height records from which useful information about the ionosphere could be extracted.

PB L 80710. POPODI. Temperature effect on capacitors and resistors. Sep 1944. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document presents the results of experiments made in order to determine the effect of temperatures ranging from +60° to -50° C. on capacitors and resistors of standard German makes. In German.

PB L 86898. UNION OF SOUTH AFRICA. STATE INFORMATION OFFICE. Lightning detector. (Weekly Newsletter, Jan 27, 1947). Jan 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a brief description of a lightning detector which rings an alarm beforehand, enabling precautions to be taken against violent storms. Credit for the invention goes to Dr. B. F. J. Schonland, noted South African scientist.

PB L 85945. U. S. ARMY AIR FORCES. TRAINING AIDS DIVISION. Precipitation static. (Manual 40). Dec 1944. 36 p. Price: Microfilm-$1.75 - Photostat-$4.00
This manual is an attempt to provide flight and ground personnel with an explanation of precipitation static and some suggestions for meeting flying problems presented by this phenomenon. The text is illustrated throughout.

PB L 11479-S. U. S. NATIONAL BUREAU OF STANDARDS. CENTRAL RADIO PROPAGATION LABORATORY. Instructions for the use of basic radio propagation predictions. (Supplement to PB 11479). (Circular 465). Aug 1947. 43 p. (Available from Supt of Docs., Washington 25, D. C., $0.25)
This manual was prepared by the staff of the Central Radio Propagation Laboratory, National Bureau of Standards. Its purpose is to explain how calculations of maximum usable frequencies and optimum working frequencies may be made for sky-wave transmission over any path for any time of day during the month in question by use of the contour charts of frequency issued monthly in the Basic Radio Propagation Predictions (CRPL Series D).

PB L 62793-S. U. S. NATIONAL BUREAU OF STANDARDS. CENTRAL RADIO PROPAGATION LABORATORY. Basic radio propagation predictions for Dec. 1947. Three months in advance. (Supplement to PB 62793) (Rept D37) Dec 1947. 15 p. Available from Supt of Docs. Washington 25. D. C.,15¢
The CRPL series D, Basic Radio Propagation Predictions, is issued monthly as an aid in the determination of the best sky-wave over any path at any time of day for average conditions for the month of prediction, 3 months in advance. Charts of extraordinary-wave critical frequency for the F2 layer, of maximum usable frequency for a transmission of 4,000 km., and percentage of time occurrence for transmission by sporadic E in excess of 15 Mc, for a distance of 2,000 km., are included.

PB L 86872. U. S. NAVAL TECHNICAL MISSION TO JAPAN. Japanese navigational aids. (Index E-09). Feb 1946. 15 p. Price: Mimeo-$0.50
Only one type of navigational aid developed by the Japanese appears to merit detailed study. This is the hyperbolic system, Tachi 39-Taki 39, developed by the Army, but not put into use. The Navy had one type of radio altimeter; the Army had two, one of which was unsatisfactory. The new types of radio beacons for the Navy, still in the development stage are of some interest, and a brief description is given. Enclosures A-E comprise a list of documents, block diagrams and schematic drawings.

PB L 81552. U. S. SIGNAL CORPS, EUROPEAN COMMAND. European radio tube manual. Jun 1947. 277 p. Price: Microfilm-$7.00 - Photostat-$28.00
The purpose of this manual is to provide information about European radio tubes and facilitate the repair of radio receiving equipment by selection of suitable substitute tubes in cases where the original receiving tube is not available. This manual contains information on approximately 6,200 different types of receiving tubes, ballast tubes and voltage regulators. Transmitting tubes and cathode ray tubes are not included. The sections of this manual are as follows: Type indication of common type tubes; Corresponding Philips and Telefunken tubes; European radio tube classification chart; American radio tube classification chart; Characteristics of Central European radio tubes; Commercial and Wehrmacht tubes; Russian tubes; Other European receiving tubes and Philips equivalents; American receiving tubes; Classification chart of European base connections; Base connections of European commercial tubes; Base connections of Russian tubes; Base connections of Wehrmacht tubes; and a German translation of the table of contents and introduction. The section on American receiving tubes contains a complete list of tubes that can be used to replace European tubes after remodelling of the radio set.

Generators, Motors, Transmission, Distribution and Allied Equipment

PB L 74352. ALLGEMEINE ELEKTRICITAETS-GESELLSCHAFT M.B.H., BERLIN. Drawings for high-voltage rectifiers used in the "Elbe-Berlin" d-c power transmission project. (FIAT Microfilm Reel GG-33, Frames 558-637A). 1941-1944. 81 f. Price: Microfilm-$1.75 - Enlargement Print-$8.50
This FIAT microfilm reel consists of drawings, parts lists and wiring and circuit diagrams for high-voltage mercury-arc rectifiers Type EQNG 1/1 "Elbe" used in the power plant for the d-c high-voltage transmission project "Elbe-Berlin." In German.

PB L 86188. ALLGEMEINE ELEKTRICITÄTSGESELLSCHAFT M.B.H., BERLIN. Iron core coil data. (CONLAN Rept 90). Feb 1941. 30 p. Price: Microfilm-$1.50 - Photostat-$3.00
This report consists of test specifications and drawings. An English translation.

PB L 85501. SCAFF, J. H. and THEUERER, H. C. Preparation of high back voltage germanium rectifiers. Final report. (NDRC Rept 14-555). Oct 1945. 63 p. Price: Microfilm-$2.50 - Photostat-$7.00
This report describes the work conducted at Bell Telephone Laboratories on Contract OEMsr-1408. This project had been originated at the request of the Radiation Laboratory at M.I.T. and Division 14, N.D.R.C. to extend the studies carried out under O.S.R.D. auspices at Purdue University on point contact rectifiers from germanium tin compositions, for use as second detectors and DC restorers in wide band radar receivers. Particular emphasis was to be placed in this development upon improving the uniformity and quality of the germanium materials used in preparing the rectifiers. Tables, curves, and illustrations are included.

PB L 86408. SCHLESINGER, PETER, METALLWARENFABRIK, OFFENBACH AM MAIN, GERMANY. "Radsonne." Aug 1945. 25 p. Price: Microfilm-$1.50 - Photostat-$3.00
This is a catalog illustrating generators, headlamps and taillamps for bicycles. The generators are rated at 6 volts and 3 watts. The complete apparatus is manufactured under the trade name "Radsonne" (literally 'wheel sun'). The performance curves of two models are given. Acetylene and kerosene lamps and battery lights are also included. A few of the plates will not reproduce since they are in color. In English, French and German.

PB L 74389. SIEMENS-SCHUCKERTWERKE A. G., BERLIN-SIEMENSSTADT, GERMANY. Cables and cable sheaths. (FIAT Microfilm Reel GG 19, Frames 7743-7917) 1939-1947. 175 f. Price: Microfilm-$2.50 - Enlargement print-$17.50
This FIAT microfilm reel consists of articles on high-tension cables, cable sheaths and insulations and cable manufacturing, as listed below. Individual items will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $2.50. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
7743 PB L 74389	Organization chart of the Siemens-Schuckert cable works. 1945. In German.	$1.50
7744-7746 PB L 74389	Brief note on aluminum cable presses. 1947. In German.	1.50
7747-7752 PB L 74389	List of patents for coaxial broad frequency band cables held by the Siemens & Halske A. G. and the Siemens-Schuckertwerke A. G. 1943. In German.	1.50
7753-7756 PB L 74389	List of patents and patent applications of the House of Siemens for cable and cable sheath production. 1944. In German.	1.50
7757-7790 PB L 74389	Report on aluminum sheathed cables and cable presses. 1947. In German.	3.50
7791-7794 PB L 74389	Insulators in cable and conductor technique. By H. Heering. In German. Reprint from "Elektrotechnische Zeitschrift" LXIII, 1942, vol. 37-38.	1.50
7795-7802 PB L 74389	Determination of steam resistance of cable sheath materials. n. d. In German	1.50
7803-7807 PB L 74389	Article on ultramicroscope examination of lamp black. By H. Heering and others. In German. Reprint from "Kautchuk" XVII (1941), vol. 5.	1.50
7808-7813 PB L 74389	German industrial standards (DIN) for varnished cable and wire. 1943. In German.	1.50
7814-7832 PB L 74389	Siemens broad frequency band cables. 1943. In German.	2.00
7833-7835 PB L 74389	Article on telecommunication cables with plastic sheaths. By H. Heering. In German. Reprint from "Elektrotechnische Zeitschrift" LXII (1941), vol. 9.	1.50
7836-7886 PB L 74389	Article on the development of telephone cable technique. By W. Hihl. n. d. In German.	5.50
7887-7917 PB L 74389	Discussion on high-tension cables including d-c high-tension cables for "Berlin-Elbe" transmission. 1939-1942. In German.	3.50

PB L 82192. SIEMENS-SCHUCKERTWERKE A. G., BERLIN-SIEMENSSTADT, GERMANY. Rectifier equipment, welding controls and timers; high-voltage generator. (FIAT Microfilm Reel J 229, Frames 4374-4914A) 1930-1946. 540 f. Price: Microfilm-$7.00 - Enlargement print-$56.00
This FIAT microfilm reel consists of descriptions, drawings and parts lists for high and low-voltage rectifiers, welding control equipment and welding timers and a high-voltage generator as listed below. Individual items will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $7.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
4374-4381A PB L 82192	High-voltage rectifier HVS 0435. Description, parts list and drawings. 1942. In German.	$2.00
4382-4421 PB L 82192	Mobile low-voltage rectifier equipment. Description, pamphlets and drawings. 1942. In German.	5.00
4422-4428 PB L 82192	Rectifier equipped railway car VW 61/62. Parts list and drawings. 1945. In German.	2.00
4429-4455 PB L 82192	High-voltage rectifier equipment for radio transmitters. Brief description, parts lists and drawings. 1940. In German.	4.00
4456-4468 PB L 82192	Standard permanently sealed single anode rectifiers. Description and drawings. 1940. In German.	3.00
4469-4475 PB L 82192	Single anode permanently sealed rectifier tank VEZ 602. Brief description, parts lists and drawings. 1940. In German.	2.00
4476-4498 PB L 82192	Single anode portable rectifier equipment VEZ 602/604. Brief description, technical data, parts lists and drawings. 1946. In German.	4.00
4499-4503 PB L 82192	High-voltage single-anode rectifier tank HVE-2 for 5000 V and 250 A for chemical purposes. Brief description and drawings with parts lists. 1946. In German.	2.00

4504-4526 PB L 82192 — Oxide-coated cathode rectifiers with and without grid control, up to 12,000 V and 27 A. Full description. 1946. In German. 4.00

4527-4538 PB L 82192 — Oxide-coated cathode rectifier KSS 1 for 3,400 V and 0.6 A without control grid. Brief description, drawing and parts list. 1940. In German. 3.00

4539-4553 PB L 82192 — Oxide-coated cathode rectifier KSS 15 for 600 V and 6 A without control grid. Description and drawings. 1940. In German. 3.00

4554-4594 PB L 82192 — Oxide-coated cathode rectifier KSS 45.1 for 7500 V and 26 A, control by sinusoidal voltage. Brief description, parts list and drawings. 1940. In German. 6.00

4595-4618 PB L 82192 — Control equipment for welding rectifiers. Description, pamphlet, parts lists and drawings. 1943. In German. 4.00

4619-4633 PB L 82192 — Welding control equipment KSS 20/120. Description, parts list, technical data and drawings. 1944. In German. 3.00

4634-4654 PB L 82192 — Welding control equipment KZS 20/120 for spot welding. Description, operating instructions, drawings and parts list. 1944. In German. 4.00

4655-4684 PB L 82192 — Small welding timer VZS 40/210 P. Brief description, operating instructions, photographs, parts lists and drawings. 1944. In German. 4.00

4685-4733 PB L 82192 — Small welding timer VZS 40/210 H. Brief description, operating instructions, parts list and drawings. 1944. In German. 6.00

4734-4764 PB L 82192 — Large welding timer VZS 100/210 P and S. Description, operating instructions, drawings and parts lists. 1943. In German. 5.00

4765-4914A PB L 82192 — High-frequency generator HGUm 01 i for approximately 16 kilocycles operated by a magnetostrictive oscillator. Description, operating instructions, drawings, technical data and parts lists. 1943. In German. 6.00

PB L 82192-S. SIEMENS-SCHUCKERTWERKE A. G., BERLIN-SIEMENSSTADT, GERMANY. Rectifier equipment, welding controls and timers; high-voltage generator. (FIAT Microfilm Reel J 229, Frames 4374-4914A, abstract cards) 1939-1946. 28 p. Price: Microfilm-$1.50 - Photostat-$3.00
Brief abstracts of the individual items on reel J 229, PB L 82192, prepared by FIAT personnel in Germany.

FOOD AND KINDRED PRODUCTS

PB L 79198. BALLS, A. K. and HILBERT, G. E. Zellstoff Fabrik Waldhof, Mannheim. (Yeast production from sulfite liquors.) (FIAT Final Rept 484). Nov 1945. 69 p. Price: Microfilm-$2.00 - Photostat-$5.00
Zellstoffabrik, Waldhof Werk, Mannheim is the main plant of a group of factories engaged in treating wood with sulfite solution to prepare paper pulp (cellulose), by methods well-known everywhere in principle. The sulfite liquor contained about 3% fermentable sugars, mostly pentoses, and 1-2% acetic acid besides the lignin from the wood. By growing Torula utilis in this liquor, fortified with ammonium salts and phosphate and neutralised to pH 4-5, about half the weight of the fermentable sugars was returned as dry (93%) yeast, and the residual liquor was sufficiently purified so that its disposal was a relatively simple matter. At first the factory practised both alcohol and yeast production chiefly to purify its effluent, but latterly with the main objective of producing food and feed proteins. From the interviews held at the Waldhof plant, supplemented by many records discovered, a fairly detailed description of the yeast growth process has been worked out. The process is essentially of the "Zulauf" variety but seems to contain innovations with respect to the aeration of the mash to a permanent emulsion of air and liquid, and the subsequent deaeration of this foam to yield a suspension of yeast in the liquid. The time of fermentation is only 5 hours at longest. The culture appears to be practically indestructible. An appendix, items A-K, contains a few selected original documents. Three of the photographic negatives will not reproduce well.

PB L 7736-6-14. CARLIN, G. T. and PILCHER, R. W. Process for microbiological production of protein. (Supplement to PB 7736). (FIAT Final Rept 499, Supp.). Jul 1945. 23 p. Price: Microfilm-$1.00 - Photostat-$2.00
This document is a supplement to the report "Production of wood sugar in Germany and its conversion to yeast and alcohol" (see Bibliography, vol. 1, p. 492), and is relative to the production of protein from paper mill and dairy wastes by microbiological methods. The following items are attached: (1) statement by Dr. Preiss, (2) flow sheet of the biogyn plant at Lenzig, (3) statement of Herr Gruber, (4) report on the suitability of this type of protein for human and animal nutrition (translation), (5) statement from the director of Lenzid Zellwolle plant, and (6) interview of Tony Holm-Kuhn, Director, Edelweiss Camembert plant.

PB L 7736-615. GAIE, M. Conference with the gentlemen of the I. G. Farbenindustrie A. G., Wolfen, about the yeasting-process, I. G. and Waldhof, on the 10/11/42. (Supplement to PB 7736). (FIAT Final Rept 499, Supp.). Apr 1942. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document contains the translation and the original of the interview with I. G. Farben, Wolfen.

PB L 81975. GLUD, JOHN B. and LINDSAY, CEDRIC E. Japanese oyster seed export program for 1947. (Supreme Commander for the Allied Powers. Natural Resources Sect Preliminary Study 10). Jun 1947. 16 p. Price: Microfilm-$1.25 - Photostat-$2.00
This report consists of: (1) general description (history, U. S. requirements, and future prospects), (2) methods of seed oyster production, (3) inspection of seed, (4) statistics of 1947 seed oyster shipments, and (5) recommendations for 1948 export program.

*PB L 85158. KIEFER, FELIX. Aeration system in the continuous Waldhof food yeast process. (FIAT Final Rept 1053). Jan 1947. 40 p. Price: Mimeo-$1.00
Technical details and blue prints of the aeration system and other phases of the Waldhof continuous yeast process, not previously available, are presented. Bibliography, patents and drawings attached.

*PB L 87378. PAREKH, K. B. Starch industry in Germany. (BIOS Final Rept 1528, Item 22). n. d. 12 p. Price: Microfilm-$1.25 - Photostat-$2.00
The process of manufacturing corn starch is outlined; this is followed by interviews of personnel of 5 plants manufacturing various kinds of starch and starch products, the Forschungsinstitute für Stärkefabrikation in Berlin, and four makers of drying equipment.

LUMBER AND WOOD PRODUCTS

*PB L 85605. BECKER, DENIS. Wood pulp industry in Germany. (BIOS Final Rept 1386, Item 22). May-Jun 1945. 46 p. Price: Microfilm-$2.00 - Photostat-$5.00
Six targets were visited and report presented from each manufacturer covering the following subjects: breeze block production; production of flooring and wall panelling tiles; preparation of timber and digesting solution; digesting process; bleaching; de-watering and drying; quality of rayon pulp; general information on yeast factory; paper mill beater room, description of four paper machines, pergamyn, imitation parchment, filter paper, spinning and sulphite bag papers, carbon papers, sanitary papers, cellulose bast and packing paper; alcohol distillery manufacturing processes; paper mills steam and electric power plant, grinding mills; and wire cloth manufacturing.

PB L 85810. KIRSTEIN, M. and THOMAS, H. R. The suitability of "moldwood" for the manufacture of ship propellers. (David Taylor Model Basin Rept R-206) Nov 1943. 11 p. Price: Microfilm-$1.25 - Photostat-$2.00
This report describes a series of tests made at the David Taylor Model Basin to determine certain physical characteristics and the water-resisting properties of a laminated-wood product known as "Moldwood." This material is remarkably strong and stiff along the grain, with a tensile strength well over 30,000 pounds per square inch, and an elastic modulus of 3.5×10^6. Across the grain it is, as might be expected, only about one-tenth as strong. Moldwood absorbs water and changes shape when submerged, especially when subjected to reduced pressures such as obtain on the back or suction side of a propeller blade. The material in its present form appears not suitable for use in boat or ship propellers. Six figures and four tables are included.

PB L 1318-68. KÜCH, WILHELM. Investigation and qualities of plastic-adhesives. (Supplement to PB 1318). (FIAT Final Rept 366, Supp.). Sep 1945. 28 p. Price: Microfilm-$1.00 - Photostat-$2.00
A statement by Dr. Wilhelm Küch concerning woodan aircraft construction adhesives used in the production of plywood and laminated wood wherein are discussed: I. adhesives made of (a) carbamid-resins (urea-formaldehyde), (b) phenolic-resins, (c) di-isocyanate derivatives, and (d) melamine-resins; II. the static, shear, and tensile strength of glue joints and junctures between (a) wood to wood, (b) wood to metal, and (c) metal to metal; and III. shrinking value, setting esasticity, hardening speed, and filling qualities of the glues. The original article, in German, is attached as exhibit A, gives a more detailed account than the English translation and carries biographical data of Dr. Küch. This is a supplement to PB 1318; v. 1, p. 85 (this Bibliography), "Production and fabrication of glued wood products in western Germany."

PB L 81011. PETERS, F. A survey of wood preservative-methods and wood preservatives as used in Germany before and during the war. In English. n. d. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This report discusses the boiler-pressure method for wood impregnation, Tanalith U and Basilit UA impregnating materials, as well as "Flunax," introduced during the war. Pine sleepers impregnated with this material by German railways, as an experiment in 1923, were found to be serviceable after 16 years.

PB L 81867. SELBO, M. L. Effect of clamp spacing on the quality of glue bond in laminated white oak timbers glued with an intermediate-temperature-setting phenol-resin glue. (Forest Products Lab Rept R1670). Jul 1947. 15 p. Price: Microfilm-$1.25 - Photostat-$2.00
The report indicates that in laminating straight members an average gluing pressure of 150 pounds per square inch gives uniform good glue bonds provided the clamp spacings are not greater than certain values given in tabulated form. Two tables and eight figures are included.

PB L 86900. UNION OF SOUTH AFRICA. STATE INFORMATION OFFICE. More soft wood for Union. (Weekly Newsletter, Mar 3, 1947). Mar 1947. 1 p. Price: Microfilm-$1.00. Photostat-$1.00
Mention is made of the aims of the Dept. of Forestry to increase the production of soft wood for building and paper products purposes.

PB L 86268. U. S. BUREAU OF AERONAUTICS. Balsa (for sandwich construction core). (Army-Navy Aeronautical Specification AN 39B9 (Aer)). Aug 1947. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00

*PB L 87367. WILSON, T. G. and MOSESSON, T. J. German wooden door industry. (BIOS Final Rept 1568, Item 22). May 1946. 23 p. Price: Microfilm-$1.50 - Photostat-$3.00
This report covers investigations carried out at 19 selected woodworking firms in western and southern Germany. The general purpose and scope was to find if any essentially new methods, machines or processes had been developed during the war which might be useful in the manufacture of doors, general joinery and woodwork. None were encountered. Photographs and diagrams are attached.

MEDICAL RESEARCH AND PRACTICE, INCLUDING CLINICAL APPLICATION OF DRUGS AND PHARMACEUTICALS

PB M 73362. DÜSSELDORF, GERMANY, ACADEMY OF MEDICINE. A collection of doctors' theses. (FIAT Microfilm Reel M-98, Frames 8539-9254). 1941-1944. 716 F.
Price: Microfilm-$6.00 - Enlargement print-$72.00.
The 20 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give the above PB number and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
8539-8572 PB M 73362	Incidence of skin and venereal diseases at the dermatological department of the Academy of medicine, Düsseldorf, during pre-war time and during the first two years of the war. By Hans-Joachim Wiltz. 1941. In German.	$3.50
8573-8602 PB M 73362	"Selter-Swift-Weer's disease" (acrodynia). Discussion of a special case occuring in identical twins. By Maria Wildt. 1942. In German.	3.00
8603-8627 PB M 73362	Contribution to the knowledge of "pneumotyphus." By Karl Wefers and others. 1942. In German.	2.50
8628-8661 PB M 73362	Liver function tests in acute rheumatic fever. By Sigrid Willemsen. 1942. In German.	3.50
8662-8671 PB M 73362	Contribution to the isolation of volatile carbonyl compounds from	

Blood. By Joseph Wildt. n.d. In German. 1.50

8672-8705 PB M 73362 Juvenile rheumatic fever, including chorea, considering the cases observed in the children's hospital, Duesseldorf in the period 1937-1941. By Heinz and others. 1943. In German. 3.50

8706-8741 PB M 73362 Defective development of the vagina as a cause of retroversioflexion and descensus uteri. By Anna Viebahn nee Werther. n.d. In German. 4.00

8742-8766 PB M 73362 Facial cancer and plastic surgery. By Karlhans Verlemann and Aachen. 1944. In German. 2.50

8767-8798 PB M 73362 Contribution to the knowledge of focal infection. By Elli Wolf and others. 1941. In German. 3.50

8799-8856 PB M 73362 Five cases of renal paralysis. By Hildegard Werth and Neuss. n.d. In German. 6.00

8857-8890 PB M 73362 Pyuria as a consequence of deformities and of calculi of the excretory urinary passages in childhood. By Hans-Günther Stoll. n.d. In German. 3.50

8891-8917 PB M 73362 Effects of the war on the spreading of venereal diseases. By Friedhelm Steinweg. 1942. In German. 3.00

8918-8956 PB M 73362 Bilateral angioma of the choroid in combination with nevus flammeus. By Gert Schildgen. 1944. In German. 4.00

8957-9041 PB M 73362 Agranulocytosis and leucopenic reactions in various diseases. By Kurt Schäfer. 1941. In German. 8.50

9042-9066 PB M 73362 "Arteriopathia pulmonalis idiogenica." By Marthel Mebusch. n.d. In German. 2.50

9067-9112 PB M 73362 A case of patchy and streaky palmar keratosis in combination with other disturbances of the cornification process of the skin and its appendages. By Hans Kissenbeck. n. d. In German. 5.00

9113-9128 PB M 73362 Fitness for military service of persons who underwent gastric operations, with special consideration of conditions typical of naval service. By Julius Knorr. 1941. In German. 2.00
In parts illegible.

9129-9157 PB M 73362 Injuries of the nervous system caused by lightning. By Tilly Krause and others. n.d. In German. 3.00
In parts illegible.

9158-9195 PB M 73362 Annulling of marriage according to the new law especially Section 37. By Adolf Bierbrauer. n.d. In German. 4.00

9196-9254 PB M 73362 Jean-Nicolas Corvisart, erstwhile physician in ordinary to Napoleon I., his merits concerning the diagnosis of heart diseases. By Ingeborg Weitz. n.d. In German. 6.00

PB M 73370. ERLANGEN, GERMANY, UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Reel C-215, Frames 7493-8364) 1933-1936. 872 f. Price: Microfilm-$6.00 - Enlargement print-$87.50.
There are 40 individual items of this FIAT microfilm reel listed below. They will be available as enlargement prints. Please give the PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
7493-7581 PB M 73370	Investigations on the courtly stile. By Hans Arens. Feb 1938. In German.	$9.00
7582-7598 PB M 73370	The change in opinion regarding the nature and origin of paradentosis. By Thea Abts. May 1939. In German.	2.00
7599-7622 PB M 73370	The behavior of the blood sugar during the general anesthesia with "Narkogen." By Hans Allerdder. May 1939. In German.	2.50
7623-7641 PB M 73370	Correct position of the mandibular joint for x-ray photography. By Elisabeth Andres. Jul 1939. In German.	2.00
7642-7654 PB M 73370	Judging of tooth filling materials as to their behavior in cases of "Abrasio dentium." By Ludwig Arens. Apr 1939. In German.	1.50
7655-7679 PB M 73370	Clinical contribution to the surgical approach of esophageal diverticula. ticula. By Fritz Arnt. Jun 1939. In German.	2.50
7680-7692 PB M 73370	In poliomyelitis, to what extent can the blood pattern and spinal fluid findings be used diagnostically and prognostically. By Eberhard Baas. Apr 1939. In German.	1.50
7693-7736 PB M 73370	Root end resection. Is focal infection, is resection of the tip of the dental root considered an adequate measure for the elimination of a focus, or should the extraction therapy be used in any case? By Fr. Bahnemann. Jun 1939. In German.	4.50
7737-7751 PB M 73370	Treatment of diarrheal disorders with centrifuged human milk. By Martha Bauer. Dec 1937. In German.	1.50
7752-7762 PB M 73370	The state of nutrition in cases of silicosis. By Alaida Bechstein. Nov 1938. In German.	1.50
7763-7779 PB M 73370	Comparison of filling materials recommended for vital amputation with those used in root fillings after extractions and amputations, in quantitative respects. By Alfred Becker. Dec 1938. In German.	2.00
7780-7789 PB M 73370	Influence of high pressures upon tissue cultures. By J. Benthaus. Nov 1938. In German.	1.50
7790-7814 PB M 73370	Electroresection of the hypertrophic adenoma of prostate. By Theod. Berk. Aug 1938. In German. Results in 70 cases.	2.50

7815-7835 PB M 73370 — Reviewing all cases of primary carcinoma and sarcoma of the mucous membranes of mouth and throat, observed in 1908-1926 and 1927-1935 at the surgical ward of the Bonn university hospital and at the surgical division of the St. Johannes hospital at Bonn. By H. W. Berker. Dec 1937. In German. 2.50

7836-7851 PB M 73370 — Occurrence of cold bacilli weak in fermenting properties, the feces during extraintestinal diseases. By H. Berkner. Jun 1938. In German. 2.00

7852-7863 PB M 73370 — Fate of coli bacilli from warm-blooded animals in various waters. By Fr. Bertram. Sep 1939. In German. 1.50

7864-7875 PB M 73370 — Investigations on the growth-inhibiting action of human and animal serum upon tubercle bacilli. By H. Biethahn. Jun 1939. In German. 1.50

7876-7896 PB M 73370 — The influence of some decomposition products of lecithin, liberated through by lecithinase A, on the isolated frog heart. By H. Blank. Jul 1939. In German. 1.50

7897-7939 PB M 73370 — Breast cancer. Cases from the surgical division of the Bonn university hospital and therapeutic results for the period 1928-1935. By Fr. Blittersdorf. Feb 1939. In German. 4.50

7940-7957 PB M 73370 — Serologic behavior of B. coli strains differing in cultural respect. By H. Verhoeven. Feb 1938. In German. 2.00

7958-7969 PB M 73370 — Relations between respiratory arrhythmia and variations of the electrocardiogram. Shiftings of the type indices. By W. Vienken. Nov 1937. In German. 1.50

7970-7988 PB M 73370 — Prolonged x-ray irradiation of laryngeal carcinoma. By H. Vieten. Feb 1939. In German. 2.00

7989-8006 PB M 73370 — Criticism of methods used in therapeutic research with regard to the drug treatment of gastro-duodenal ulcers. By Julius Vogel. Jan 1938. In German. 2.00

8007-8018 PB M 73370 — Röntgenological studies on changes in bone structure in cases of foot arthrodeses after temporary extirpation of the talus. By Herbert Voss. Nov 1936. In German. 1.50

8019-8033 PB M 73370 — Development of carcinoma after X-ray treatment of psoriasis. By Hans Vuellers. Apr 1933. In German. 1.50

8034-8051 PB M 73370 — Canities prematura fere totalis after alopecia areata. By K. Wagenbach. Sep 1939. In German. 2.00

8052-8066 PB M 73370 — Carbohydrate decomposition in the heart. By H. Wagner. Dec 1937. In German. 1.50

8067-8077 PB M 73370 — Pregnancy after recovery from glandular hyperplasia. By J. Walther. Jun 1939. In German. 1.50

8078-8096 PB M 73370 — Contributions to the pathology and experimental therapy in infections of chicken with Plasmodium gallinaceum. By Alois Weber. Sep 1939. In German. 2.00

8097-8123 PB M 73370 — Judging hereditary epilepsy on the ground of the law protecting hereditary health and the differential diagnosis of this disease. By H. J. Weber. 1939. In German. 3.00

8124-8145 PB M 73370 — Navicular fractures. By Walther Weber. Nov 1938. In German. 2.50

8146-8161 PB M 73370 — Cultural investigations regarding differences in the power of saliva to inhibit the growth of tubercle bacilli. By C. Weichel. Apr 1939. In German. 2.00

8162-8207 PB M 73370 — Epicrisis of the treatment of several cases of pre-coma and coma diabeticum. By Fr. Wenner. Apr 1939. In German. 5.00

8208-8255 PB M 73370 — The idea of settlement in the Third Reich and its realization in the district of Bonn. By Hermann Wendel. Jul 1938. In German. 3.00

8256-8279 PB M 73370 — Statistical and clinical contributions to the metabolic basis of diffuse scleroderma. By J. Werner. Sep 1939. In German. 2.50

8280-8296 PB M 73370 — Is influenza of infants and children, is the white blood pattern an indication of the gravity and a criterion for the prognosis of the disease? By Gerta Wertz. Feb 1939. In German. 2.00

8297-8316 PB M 73370 — Relations between the heart, as it appears in the x-rays picture and constitution. By K. Wesendahl. Jun 1939. In German. 2.00

8317-8332 PB M 73370 — Is the result of Bertrall's copper solution test a criterion of the heredity of diabetes mellitus? By H. Wichterich. Sep 1939. In German. 2.00

8333-8354 PB M 73370 — Abrasion of natural teeth. To what extent must and can the principles of the abrasion of natural teeth be considered in diseases and disorders of dental systems, in total and partial prostheses and in the replacement of individual teeth? By Eugenie Wiener. Nov 1938. In German. 2.50

8355-8364 PB M 73370 — Relative duration of systole in fat people. By Fr. Witsch. Apr 1938. In German. 1.50

PB L 74089. ERLANGEN, GERMANY, UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Reel C-226, Frames 7572-8572) 1936-1939. 1001 f. Price: Microfilm-$6.00 - Enlargement print-$101.50. The 61 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give the PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
7572-7590 PB M 74089	The tendency to hemorrhages in the oral cavity. By G. Wetzel. 1939. In German.	$2.00

7591-7606 PB M 74089 — Comparative studies regarding the origin and course of osteomyelitis of the tubular bones and jaws. By J. C. Wewel. 1939. In German. 2.00

7607-7615 PB M 74089 — The allergic genesis of so-called "Icterus simplex." By H. W. Werseberg. 1939. In German. 1.50

7616-7624 PB M 74089 — Contribution to the problem of aeuritis of the N. stato-acusticus. By A. von Zelberschwecht. 1938. In German. 1.50

7625-7645 PB M 74089 — History of "progressive paralysis." By E. Hesselmann. 1939. In German. 2.50

7646-7675 PB M 74089 — History of the public health system in Neuss up to 1850. By G. Holtz. 1939. In German. 3.00

7676-7684 PB M 74089 — Significance of the examination of the stomach-rinsing fluid for the diagnosis of tuberculosis in children and for the evaluation of the infectiousness of the disease. By H. G. Honerla. 1938. In German. 1.50

7685-7701 PB M 74089 — Pantocaine, a reliable drug for dental work in the area of the trigeminal nerve. By F. Kathke. 1938. In German. 2.00

7703-7717 PB M 74089 — Etiology of purulent leptomeningitis, as far as the patient's age and sex are concerned. By J. Kaitel. 1938. In German. 1.50

7718-7734 PB M 74089 — Bringing up prematures at the Düsseldorf children's Hospital in the period 1932-1939. By O. Klingen. 1939. In German. 2.00

7735-7747 PB M 74089 — Studies on the effect of alkaline earth salts on the flocculation of various proteins. By K. Knapp. 1939. In German. 1.50

7748-7759 PB M 74089 — Effectiveness of hypnotics when combined with calcium. By R. Knauer. 1939. In German. 1.50

7760-7771 PB M 74089 — Formation of fistula between biliary system and bronchial tree in cases of cholelithiasis. By W. Knipperts. 1939. In German. 1.50

7772-7783 PB M 74089 — The effect of spinal anesthesia in Dolmas's vaginal quick-livery. By G. Kochling. 1938. In German. 1.50

7784-7795 PB M 74089 — Identical with the foregoing.

7796-7818 PB M 74089 — Experiences with surgical treatment of purulent affections of the lung. By R. König. In German. 2.50

7819-7840 PB M 74089 — Roentgenologic representation of the os petrosum with the aid of automatic devices. By E. Kohl. 1939. In German. 2.50

7841-7849 PB M 74089 — Premature rupture of the amniotic membranes during labor. Study of cases observed in the maternity hospital of the Medical Academy of Düsseldorf. By H. K. de Denegri. 1939. In German. 1.50

7850-7860 PB M 74089 — Influence of diets on skin diseases, with the exception of elimination diets in allergy. By W. Krause. 1939. In German. 1.50

7861-7868 PB M 74089 — Effect of tyrosine and adrenalin cortex on the tendency of the skin to inflammations. By M. Krock. 1939. In German. 1.50

7869-7878 PB M 74089 — Investigations concerning the agglutination titre of human blood sera. By R. Lang. 1939. In German. 1.50

7879-7905 PB M 74089 — Medicine as presented by the Roman lyrical poets, Catull, Tibull, Persius, Properzius and Statius. By E. Leiss. 1939. In German. 3.00

7906-7919 PB M 74089 — The forensic importance of oral injuries caused by the dentist. By C. Lieb. 1939. In German. 1.50

7920-7929 PB M 74089 — Structure of tumors and their sensitivity to irradiation treatment. By E. Lindgen. 1939. In German. 1.50

7930-7942 PB M 74089 — Description of pneumococcic peritonitis on the basis of experiences at the surgical department of the municipal hospital of the Free City of Danzig. By G. Loytved. 1939. In German. 1.50

7943-7957 PB M 74089 — History of the heredity of tuberculosis. By E. Mähler. 1939. In German. 1.50

7958-7974 PB M 74089 — On the problem of gasoline poisoning. By M. Mann. 1939. In German. 2.00

7975-7989 PB M 74089 — Symptomatology of a case of hematoma of the pia mater, associated with angiomatous encroachment upon the os petrosum. Remarks on the problem of heredity of angiomatosis cerebri. By E. Masur. 1939. In German. 1.50

7990-8023 PB M 74089 — Clinical and bacteriological peculiarities in cases of dysentery or similar diseases. By E. Mehl. 1939. In German. 3.50

8024-8044 PB M 74089 — Injuries due to ulcus and to drugs of a similar chemical nature. By E. Meissner. 1939. In German. 2.50

8045-8056 PB M 74089 — Serum treatment of pneumonia. By J. Mönnicks. 1939. In German. 1.50

8057-8076 PB M 74089 — Experiences with provocation with "Pelligen" according to Grüneberg. By G. Müller. 1938. In German. 2.00

8077-8091 PB M 74089 — Application of a mechanical drive for automatic back-and-forth movement of saws in surgery of the jaws. By J. Münning. 1939. In German. 1.50

8092-8104 PB M 74089 — The possibilities of employing small picture photography within the scope of dentistry and surgery of mouth and jaws. By F. J. Nell. 1938. In German. 1.50

8105-8118 PB M 74089 — The x-ray picture as a diagnostic aid in cases of tumor of the jaws. By E. Neumann. 1939. In German. 1.50

8119-8129 PB M 74089 — Twilight sleep treatment in psychiatry, particularly in schizophrenia and depression. By H. Horpoth. 1939. In German. 1.50

8130-8139 PB M 74089 — Sensitivity of infants to morphine. By A. C. Ohling. 1939. In German. 1.50

8140-8152 PB M 74089 — Contribution to diffuse fatty degeneration of the glia in the white matter of the cerebral hemisphere of children. By T. Orth. 1939. In German. 1.50

8153-8174 PB M 74089 — The work of Theodor Albrecht Edwin Klebs in the field of bacterial research. By A. W. Oster. 1939. In German. 2.50

8175-8183 PB M 74089 — Two cases of hiatus of the diaphragm. By E. Prigge. 1939. In German. 1.50

8184-8197 PB M 74089 — Process of propagation of ectromelia virus in the epithelium of the hind paw of mice and on the chorio-allantoic membrane of chicken embryos. By E. Reiter. 1939. In German. 1.50

8198-8204 PB M 74089 — Conduction of labor with the help of drugs, with special regard to continuous hypophysin drop infusions. By H. Ritter. 1939. In German. 1.50

8205-8221 PB M 74089 — Antonio Maria Valsalva, his life and work in the field of medicine. By P. Roeseler. 1939. In German. 2.00

8222-8239 PB M 74089 — Biologic studies concerning the population in Hombers near Ratingen. By M. Rosin. 1938. In German. 2.00

8240-8248 PB M 74089 — Acute hydramnion and intestinal obstruction in pregnancy. By A. Sauvageot. 1939. In German. 1.50

8249-8255 PB M 74089 — Effect of pretreatment with A. T. 10 in animal experiments on anaphylaxis. By W. Schiffer. 1939. In German. 1.50

8256-8262 PB M 74089 — A suitable circulatory method for determining the oxygen consumption of dogs. By H. Schnorrenberg. 1939. In German. 1.50

8263-8272 PB M 74089 — Contribution to the stereometric x-ray examination of the bronchial tree and the lung. By J. Schoenmackers. 1936. In German. 1.50

8273-8279 PB M 74089 — Effect of tyrosine on the tendency of the skin to inflammations. By E. Schroer. 1938. In German. 1.50

8280-8295 PB M 74089 — Allergy and nutrition, with special regard to the skin. By O. Schulemann. 1939. In German. 2.00

8296a-8308 PB M 74089 — Medical care in vocational cooperative groups. The system of routine medical examinations in the coal mines Rheinpreussen and Diergardt-Mevissen (in the district of Moers). By van der See. 1939. In German. 1.50

8309-8320 PB M 74089 — Investigations on the galvanic excitability of adults. By H. Spickhoff. 1939. In German. 1.50

8321-8340 PB M 74089 — Results of short diastance irradiations. By J. Theine. 1939. In German. 2.00

8341-8351 PB M 74089 — Rate of growth of hair and nails in relation to the region of the body and to age. By H. Thonnessen. 1938. In German. 1.50

8352-8378 PB M 74089 — History of injuries by lightning and their treatment. By J. Tönnes. 1939. In German. 3.00

8379-8387 PB M 74089 — Rare case of ovarian tumor (teratoma embryonale). By G. Veltkamp. 1939. In German. 1.50

8388-8399 PB M 74089 — The outcome of transverse positions in the period April 1, 1928 to Sep 30, 1937. By O. Veltkamp. 1939. In German. 1.50

8400-8412 PB M 74089 — The problem of hypersensitivity to bacterial filtrates containing toxins. By W. Schafer. 1938. In German. 1.50

8413-8522 PB M 74089 — Biomechanics of paradentosis, particularly correction of faulty articulation by grinding. By K. Thielemann. 1938. In German. 11.00

8523-8533 PB M 74089 — Experiments on the nutritive utilization of various kinds of fruit. By M. Abb. 1939. In German. 1.50

8534-8549 PB M 74089 — Observations with leech therapy, with special consideration of anaphylaxis. By E. Albach. 1939. In German. 2.00

8550-8572 PB M 74089 — Effect of culture media containing sulfonamide on the growth of gonococci. Strengthening of gonococcal strains. By G. F. Asmuth. 1938. In German. 2.50

PB M 74064. ERLANGEN, GERMAN, UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Reel G-239, Frames 375-1261) 1937-1940. 887 f. Price: Microfilm-$6.00 - Enlargement print-$89.00.
The 55 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
375-397 PB M 74064	Hygienic investigations as a contribution to the control of the infant mortality in a border area of the Bavarian Ostmark. By U. Romann. 1939. In German.	$2.50
398-410 PB M 74064	Relationship of the blood cell sedimentation rate to the formation of agglomerates of erythrocytes. By F. Ross. 1940. In German.	1.50
411-420 PB M 74064	Contribution to the histology of spontaneous fowl tuberculosis. By E. Roth. 1940 In German.	1.50
421-433 PB M 74064	On blood groups and their relationship to diseases: a study based on investigations during 1916-1917. By J. Roth. In German.	1.50

434-449 FB M 74064 — The causes of the toxicity of rhesrsans. By G. Rothdach. 1940. In German. 2.00

450-481 FB M 74064 — Empyema of the knee joint. By A. Ruckelshausen. 1940. In German. 3.50

482-491 FB M 74064 — Two cases of endometriosis in laparotomy scars. By A. Rudolph. 1940. In German. 1.50

492-504 FB M 74064 — "Dolor post extractionem." Review of symptoms of "dolor post" on the basis of literature reports and experience in every-day practice. By G. Rühling. In German. 1.50

505-513 FB M 74064 — The antithrombin content of the blood during an anaphylactic state. By G. Rühl. 1939. In German. 1.50

514-531 FB M 74064 — Diaphragmatic hernia and its diagnosis, particularly by x-rays. By A. Ruhnau. 1940. In German. 2.00

532-544 FB M 74064 — Gastric cancer, operations and final results of 102 cases of the Munich university hospital. By L. Ruland. 1940. In German. 1.50

545-567 FB M 74064 — Contribution to the treatment of nausea in dentistry. By O. Ryckmanns. 1939. In German. 1.50
Frames 547-567 and 569-578 in this item are missing due to faulty numbering.

568-601 FB M 74064 — Vital and mortal amputations. By L. Sailer. 1940. In German. 1.50

602-614 FB M 74064 — On the differences of the pulses. Book III, folder 1-3. By M. Sailer. 1940. In German. 1.50

615-627 FB M 74064 — Two peculiar cases of attempt of criminal abortion in the unfit. By M. Sandy. 1940. In German. 1.50

628-649 FB M 74064 — Investigations regarding the tonsillar flora during tonsillitis and influenza. By H. Sasmack. 1937. In German. 2.50

650-665 FB M 74064 — A case of primary pedunculated myosarcoma of the small intestine. By R. Schägger. 1939. In German. 2.00

666-679 FB M 74064 — Poisonings with salicylic acid and its esters: acetylsalicylic acid, salicylosalicylic acid (diplosal), methylsalicylic acid (wintergreen oil), and glycerol ester (glycosal). By H. Schallmayer. 1939. In German. 1.50

680-698 FB M 74064 — The possibility to evaluate lung contact plates in clinical x-ray diagnosis, and the technic of taking such plates. By H.-W. Schedel. 1937. In German. 2.00

699-714 FB M 74064 — Comparative histopathological study of glomerulonephritis: a casuistic contribution. By G. Scheid. 1940. In German. 2.00

715-744 FB M 74064 — Nutritional care of workers, particularly with regard to diet kitchens near the work shop. By H. Schein. 1940. In German. 3.00

745-767 FB M 74064 — Tumors of the orbit. By M. Schepss. 1940. In German. 2.50

768-805 FB M 74064 — Surgery of the cranial bones. By E. Scherrer. 1939. In German. 4.00

806-815 FB M 74064 — Investigations on the occurrence of tubercle bacilli in alveolar cysts and carious teeth. By E. Scheurer. 1940. In German. 1.50

816-826 FB M 74064 — Hemorrhages from diseased Meckel diverticula in children. By H. Schewelo. 1940. In German. 1.50

827-841 FB M 74064 — Brain tumors. By E. Schiffers. 1938. In German. 1.50

842-852 FB M 74064 — A case of divulsion fractures of spinal processes as a result of metastases of breast cancer. By M. Schiller. 1940. In German. 1.50

853-876 FB M 74064 — The book on the teeth; by Bartholomaeus Eustachius. Chapter 26-30. By O. Schindler. 1940. In German. 2.50

877-901 FB M 74064 — Tetanus and tetanus prophylaxis. By K. Schirmer. 1940. In German. 2.50

902-916 FB M 74064 — Suppurating urachocele in a case of ectopy of the ureter. By B. Schlegel. 1940. In German. 1.50

917-928 FB M 74064 — The problem of determination of blood alkalinity by fluorescent indicators. By M. Schloussingar. 1940. In German. 1.50

929-937 FB M 74064 — Vascular injuries as a result of blunt trauma. By I. Schlott. 1940. In German. 1.50

938-954 FB M 74064 — Bioloeic treatment of hallux valgus. By K. Schmid. 1940. In German. 2.00

955-969 FB M 74064 — On rupture of ligament and tendon of the knee extension system. By J. Schmid. 1938. In German. 1.50

970-983 FB M 74064 — Behavior of the thyroid in different ages, sexes and constitutions. Contribution to the "geocrasbic" pathology of the thyroid. By M. Schmid. 1940. In German. 1.50

984-998 FB M 74064 — The bioloeic effects of atmospheric electricity. By H. Schmidt. 1940. In German. 1.50

999-1007 FB M 74064 — Advantages and dangers of taking x-ray plates. By H. Schmidt. 1940. In German. 1.50

1008-1024 FB M 74064 — Examination of sets of stuttering identical twins. Origin and heredity of stuttering. By K. Schmidt. 1939. In German. 2.00

1025-1038 FB M 74064 — A case of early occurring paralysis agitans. By C. P. Schmidt. 1940. In German. 1.50

1039-1053 FB M 74064 — Statistical studies on 364 fractures of the jaw. By C. Schmidt. 1940. In German. 1.50

1054-1067 FB M 74064 — Translation and interpretation of "Essay d'Odontotechnie ou Dissertation sur les Dents Artificielles" by Claude Mouton, Paris 1746 (chapters XV (continuation) and V).

By H. Schmitz. 1940. In German. 1.50

1068-1077 PB M 74064 — Contribution to the knowledge of primary ureteral tumors. By T. O. Schwenk. 1940. In German. 1.50

1078-1112 PB M 74064 — The most frequent hour of dying. By H. Schneider. 1940. In German. 3.50

1113-1121 PB M 74064 — Can hernes gestationis be an indication for interruption of pregnancy? By H. Schneider. 1940. In German. 1.50

1122-1131 PB M 74064 — On the knowledge of hernias of the umbilical cord. Report of a case of a pedunculated hernia funiculi umbilicalis. By K. Schneider. 1940. In German. 1.50

1132-1139 PB M 74064 — Cycle changes in sterilized woman. By O. Schneider. 1940. In German. 1.50

1140-1153 PB M 74064 — Combined suicide : poisoning with sulfuric acid and stabbing into the heart. By J. Schnitzler. 1940. In German. 1.50

1154-1171 PB M 74064 — Galen's synopsis of his treatises on the pulses (chapters 1-12). Translation and interpretation. By M. Schnitzler. 1940. In German. 2.00

1172-1184 PB M 74064 — Case of coxa vara concenita with dysplasia of the femur. By H. Schondorf. 1940. In German. 1.50

1185-1195 PB M 74064 — Causes and consequences of the reduction of birth rate among the Germans in the Rumanian Banat. By Schörnig. 1939. In German. 1.50

1196-1207 PB M 74064 — Galen. On the differences of the pulses (Second book, chapter 1-8). On medical terminology. By F. Schrott. 1939. In German. 1.50

1208-1224 PB M 74064 — The significance of copper for the growth of tumors and for infection. By D. Schubert. 1940. In German. 2.00

1225-1242 PB M 74064 — The localization of bone and joint tuberculosis and its relation to age and sex. By H. Schubje. 1940. In German. 2.00

1243-1251 PB M 74064 — Fatal acute phosphorus poisoning in a 6-year-old child after ingestion of faultily proportioned phosphorated cod-liver oils. By G. Schüssler. In German. 1.50

1252-1261 PB M 74064 — The dependence of the lead content of soft tissues on the blood content of the organs and the blood lead level. By G. Schulenburg. 1939. In German. 1.50

PB M 73348. FREIBURG, GERMANY. UNIVERSITY. Textbooks and reports in the field of medicine. (FIAT Microfilm Reel M 75, Frames 2623-3512) 1942-1944. 908 f.
Price: Microfilm-$6.00 - Enlargement print-$91.00

The 17 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
2623-2837 PB M 73348	Office treatment of skin and venereal diseases. By Philipp Keller. 1942. In German. Textbook, The Therapy of skin and venereal diseases. Publisher: Springer, Berlin.	$21.50
2838-2967 PB M 73348	Short distance irradiation. By Henry Chavul. In German. Textbook, Die Nahbestrahlung. Publisher: Thieme, Leipsig.	13.00
2968-3086 PB M 73348	Disturbances of blood supply and their treatment. By F. Sauerbruch. 1943. In German. From volume 65 of Neue deutsche Chirurgie.	2.00
3087-3106 PB M 73348	Judicious control of thrombosis to eliminate embolism in surgical treatment. By E. Rehn. n. d. In German.	2.00
3107-3119 PB M 73348	Applied muscular physiology in the treatment and cure of bone fracture. By Rehn. n. d. In German.	1.50
3120-3131 PB M 73348	The removal of missiles from the heart. By E. Rehn. n. d. In German.	.50
3132-3143 PB M 73348	Radical operation of congenital central diaphragmatic hernia in childhood. By E. Rehn. n. d. In German.	1.50
3144-3175 PB M 73348	Experiments on animals for the study of ear injuries caused by fluctuations of atmospheric pressure. By Otto Riecker. n. d. In German.	3.50
3176-3185 PB M 73348	Prerequisites for developing acoustic auxiliary apparatus for the blind. By Riecker. n. d. In German.	1.50
3186-3187 PB M 73348	Correspondence with offices of the Social Welfare Service for the Blind. n. d. In German.	1.50
3188-3204 PB M 73348	Animal experiments on changes in function and structure of the ear as a result of reduced pressure. By Otto Riecker. 1944. In German. Published in: Archiv für Ohren-Hals-Kehlkopfheilkunde, vol. 154, p. 390.	2.00
3205-3412 PB M 73348	Inhibition of germ propagation as a means of defense against microbes. By Hermann Dold. 1944. In German.	21.00
3413-3430 PB M 73348	Diphtheria in Southern Baden (Germany) and its relationship to meteorologic variations, shifting of population, and vaccination. By Gertrud Reimold. n. d. In German.	2.00
3431-3462 PB M 73348	Hemolytic anemias based on abnormal serological reactions. By L. Heylmeier and Fritz Hahn. n. d. In German.	3.50
3463-3473 PB M 73348	Auto-agglutination of erythrocytes. n. d. In German.	1.50
3474-3482 PB M 73348	On the problem of hunger edema. By Ludwig Weissbecker and Ernst Holzer. n. d. In German.	1.50
3483-3512 PB M 73348	P substance in blood. n. d. In German.	3.00

PB L 85657. BUNA-WERKE G.M.B.H., SCHKOPAU, GERMANY, and I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Koresin manufacture. Jan 1945. 135 p. Price: Microfilm-$4.25 - Photostat-$14.00
File contains letters and reports on "Koresin" manufacture. "Koresin" is a bonding agent used in production of tires from Buna. It is made by vinylation of butyl phenol in presence of zinc naphthenate. Detailed information is given concerning starting materials, process, equipment, yield, cost, etc. In German with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

* PB L 87343. FINN, S. R. and EDELSTEN, R.E.F. Interrogation of Dr. Kurt Ueberreiter and Dr. Ernst Asbrandt. (The bonding of rubber to metal). (BIOS Interrogation Rept 508). Sep 1947. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
Information was gained concerning the brass method and the desmodur method. Both methods give an adhesion of about 50 kg./cm^2, the brass method being considered preferable on the grounds of care and simplicity.

PB L 85653. HANSCHKE. Isomerisation of vinylcyclohexene. Sep 1942. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
Catalytic isomerization of 1-vinylcyclohexene-(3), obtained by dimerization of butadiene, gave a small yield of about 10 percent of conjugated isomer 1-vinylcyclohexene when heated to 300 degrees C with HCN as a catalyst. In German with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 73430. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Technical drawings and flow sheets. (FIAT Microfilm Reel M 146, Frames 3637-3802) 1938-1946. 166 f. Price: Microfilm-$2.50 - Enlargement print-$17.00
This reel contains drawings of the Buna S plant at Ludwigshafen and of its equipment, and flow sheets illustrating its processes; also two drawings of calcium carbide furnaces. In German.

* PB L 86690. SPEARS, T. J. Interrogation of Dr. Stocklin, Jul 10, 1946. (Heat resistance of Perbunan compounds). (BIOS Interrogation Rept 155). Sep 1946. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
Dr. Stöcklin was questioned on the following methods: (a) of imparting good heat resistance to Perbunan compounds, (b) of obtaining low compression set, (c) of avoiding high shrinkage after mould vulcanisation of mixtures of GRS synthetic with large amounts of natural rubber, and (4) he was asked whether dermatitis due to Buna S or Perbunan had ever occurred in Germany.

PB L 35168-PB L 35292, PB L 35294-PB L 35310. U.S. OFFICE OF RUBBER RESERVE, ed. German synthetic rubber reports collected by T.I.I.C. (Microfilm Reel No. 5841-2).
Because of continued interest in the Rubber Reserve Microfilms, 5841-1 through 5841-10, which have appeared as PB 13321-PB 13330 (see v.4, p. 500-501, of this Bibliography), the reports are being made available individually. The present groups of reports (PB L 35168-PB L 35292, PB L 35294-PB L 35310) duplicate the contents of the second reel (Reel 5841-2, PB 13322). The reports deal with Reppe's butadiene process and the progress in acetylene chemistry at Ludwigshafen. Various drawings are included. Large portions of the material are hard to read and will not reproduce well. An index to the individual items is also given (PB 35991). Abstracts for the individual reports in Reel 5841-1 (PB 13321) will be found in vol. 7, p. 968.

PB L 35991. U.S. OFFICE OF TECHNICAL SERVICES, BIBLIOGRAPHY SECTION. Index to Rubber Reserve Microfilm Reel 5841-2, PB L 13322. Feb 1948. 19 p. Microfilm-$1.00 - Photostat-$2.00
This index gives the PB and Rubber Reserve numbers of the individual items, date, and German title with its English translation.

PB L 35168. REPPE. Concerning the present status of the new butadiene process. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 918) Sep 1940. 16 f. Price: Microfilm-$1.00 - Enlargement Print-$2.00
The following four phases are described in detail: (1) the preparation of butynediol from acetylene and formaldehyde, (2) the conversion of butynediol to butane 1,4-diol, (3) the conversion of butane 1,4-diol to tetrahydrofuran, and (4) the preparation of butadiene from tetrahydrofuran or 1,4-butylene glycol. The various reactions and byproducts which can be obtained from the intermediates are discussed and illustrated by two flowsheets. In German.

PB L 35169. TRIESCHMANN. Production process of butynediol. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 917) Jul 1944. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a detailed report on the production of butadiene from butyne-1,4-diol (from acetylene and formaldehyde) as carried out at Ludwigshafen. Special attention is given to the treatment of the catalyst, the concentrations of formaldehyde and acetylene, the distillation of propargyl alcohol and other technical measures. In German.

PB L 35170. I.G. FARBENINDUSTRIE, A.G. Catalyst II. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 19) Mar 1941. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a table which shows the results of experiments on the preparation of crude butadiene from butylene glycol ("butol") with coke-monosodium phosphate-phosphoric acid as catalyst. Yields are given for each individual running and averages for pairs. In German.

PB L 35171. BUB and MEIS. The plant for production of the butadiene catalyst. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 21) Jun 1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This brief note describes changes and improvements in the equipment for the preparation of the butadiene catalyst. Poor legibility. In German.

PB L 35172. I.G. FARBENINDUSTRIE, A.G. Catalyst I. (Part of Rubber Reserve Microfilm Reel 5841-1, PB 13322) (Rubber Reserve Rept 18) Jan 1943. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a table which shows the results of experiments for the preparation of crude butadiene from butylene glycol ("butol") with coke-monosodium phosphate-phosphoric acid as catalyst, which in its composition differs slightly from that used in another experiment. (See PB 35170). In German.

PB L 35173. KNEPPER. Butadiene catalyst. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 16) Jul 1943. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The results obtained with 2 different catalysts are discussed. The catalysts are identified by number only. Legibility poor. In German.

PB L 35174. ROTHBASS. Report on the status of hydrogenation of vinylacetylene by means of zinc dust. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 447) Jul 1937. 11 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a detailed account of experiments on the laboratory scale. They comprised hydrogenation of vinylacetylene by shaking with a suspension of coppered zinc dust; by using a fast agitator with a zinc dust suspension with simulaneous coppering; and by using zinc dust suspension with simultaneous coppering; and by using zinc dust with NaOH. Experiments on a technical scale were only beginning. Evaluation of the butadiene obtained was postponed. Some calculations are included. Partly illegible. In German.

PB L 35175. I.G. FARBENINDUSTRIE, A.G. Report on the discussion of Dec 10, 1940, in Ludwigshafen on Rhine, concerning acetylene decomposition. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 433) Jan 1941. 9 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The subject of this meeting was the safety problem involved in spontaneous decomposition of acetylene under pressure, both in piping and in production. Since the use of pressure up to 20 atmospheres was desirable for a number of processes, interest was centered upon limiting explosions rather than preventing them. Filters consisting of gravel, silicates, and parallel plates were said to stop the explosion waves up to 6 atmospheres; fine porous filterstone, up to 20 atmospheres. Further experiments were to be carried out. In German.

PB L 35176. FRANKE. Second note on acetylenes of higher molecular weight: The distillation of the condensate. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 587) Feb 1941. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This follows PB 35177. The residue of the distillation at 110° suddenly decomposes with increasing pressure and temperature. Explosion can be prevented by addition of wash oil and/or an oxidation preventive. Distillation results are tabulated. In German.

PB L 35177. FRANKE. First note for the record, informing on higher acetylenes. Polymerization of the acetylene homologous fractions. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 588) Feb 1941. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Wash oil was saturated with arc acetylene, and kept at 180° C for various periods up to 21 hours. A polymer was obtained in the form of brown flakes. The properties of this polymer are described. Its chemical nature was still under investigation. In German.

PB L 35178. I.G. FARBENINDUSTRIE, A.G. Experiments for the preparation of 1,6-diols, 1,6-dicarboxylic acids and 1,6-diamines of straight-chain hydrocarbons. (Part of Rubber Reserve Microfilm Reel 5941-2, PB 13322) (Rubber Reserve Rept 583) Jul 1941. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report deals (1) with the preparation of butynediol-dichloroformate by the reaction of phosgene with butynediol. It was intended to obtain 1,4-dichlorobutyne by thermal decomposition of the ester. The transformation of 1,4 dicyanobutyne from dichlorobutyne is also mentioned. The report also deals with experiments for the following condensations: (a) acetylene with ethylene oxide, (b) acetylene with calcium chloracetate, (c) acetylene with ethylenimine, and (d) diacetylene with formaldehyde. Legibility poor. In German.

PB L 35179. FRANKE. Third and fourth note on acetylene of higher molecular weight: (a) distillation of 1 liter of combined condensate (b) preparation of concentrated diacetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 581) Jul 1941. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The third note describes the properties of various fractions obtained in the distillation of an acetylene condensate produced by the arc process. According to the fourth note about 90% pure diacetylene was obtained from the C_4-fraction by repeated crystallization at different temperatures. Much of the report is completely illegible. In German.

PB L 35180. THIELE and FRANKE. Note on the reaction of diacetylene with methylolamines. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 574) Mar 1942. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Diethylamine was reacted with paraformaldehyde with and without a catalyst. Fractional distillation yielded diethylamino-pentadiyne and bis-diethylamino-hexadiyne. Special attention is given to the picrates and to the hydrogenation of the diynes. In German.

PB L 35181. WEISSBACH and FRANKE. The condensation of higher acetylenes with formaldehyde under the influence of alkali. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 573) Mar 1942. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report describes experiments for the following reactions-(1) diacetylene with formaldehyde, (2) phenylacetylene with formaldehyde, (3) methylacetylene with formaldehyde, and (4) diacetylene with acetaldehyde. In German.

PB L 35182. I.G. FARBENINDUSTRIE, A.G. Note on the state of the condensation of diacetylene with formaldehyde under use of a supported silver catalyst. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 570) Apr 1942. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
It was found that the diyne yield increased with increasing amounts of silver. The procedure was as follows: Dry silica skeins were impregnated with ammoniacal silver solution, in the wet state heated to a determined temperature, and diacetylene in gaseous form passed over this material. In German.

PB L 35183. FRANKE. The reactiveness of phenylacetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 571) Apr 1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Several reactions are described. Phenylacetylene by reaction with formaldehyde in presence of caustic potash, forms phenylpropargyl alcohol in moderate yield. With acetone it forms phenyl-methyl-butynol in 80% yield. Much of the report is completely illegible. In German.

PB L 35184. FRANKE. The preparation of tetramethylhexadiynediol. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 567) Apr 1942. 5 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50

The method consisted of the addition of a mixture of diacetylene and acetone to caustic potash. Good yields were obtained. Results are tabulated. Further discussion and description of the process are illegible. In German.

PB L 35185. STEINIACHNER. Determination of higher acetylenes in gas mixtures. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 480) Apr 1942. 5 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The gas is dissolved in acetone, and an excess of 10% silver nitrate solution containing 25% of ammonia is then added. The silver salt precipitates. A table shows results of analyses. Part of the report is illegible. In German.

PB L 35186. THURY. Experiments on the quantitative transformation of acetylenes into olefines. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 479) May 1942. 10 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Higher acetylenes cannot satisfactorily be used in analyses as they polymerise and dissociate. This led to experiments to hydrogenate them to olefines. No satisfactory results were obtained, however. Hydrogenation of vinylacetylene, with chromous chloride dissolved in hydrochloric acid, results in an equilibrium of 70% butadiene (maximum) and 30% vinylacetylene. Fractional distillation removes the butadiene to further hydrogenation of the remaining vinylacetylene. No simpler way could be found to accomplish this. A graph shows the decrease in acetylene content of a gas conducted through chromous chloride solution. Part of the report is completely illegible. In German.

PB L 35187. SEEMANN and FRANKE. The reaction of diacetylene with alcohol. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 564) Jun 1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The report describes the results obtained with the addition of one, two, and three molecules of alcohol to diacetylene. A fourth molecule could not be added. Further experiments were to be made. Poor legibility. In German.

PB L 35188. FRANKE. The conversion of phenylacetylene to acetophenone. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 561) Jun 1942. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A reaction is described by which phenylacetylene present in compressor-oil will yield acetophenone (treatment with sulfuric acid and mercuric sulfate). In German.

PB L 35189. FRANKE. The reaction of isobutyraldehyde with diacetylene and monovinylacetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 560) Jul 1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Diacetyleneglycol was obtained by the reaction of diacetylene with isobutyraldehyde in 50% potassium hydroxide solution, whereas the reaction of monovinylacetylene with isobutyraldehyde produced only trimethylpentanediol. Hydrogenation experiments with these products are also indicated. In German.

PB L 35190. FRANKE. The reaction of monovinylacetylene with acetone. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 558) Jul 1942. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a brief report on the preparation of methylhexenynol by the reaction of monovinylacetylene with acetone in ether in caustic potash. In German.

PB L 35191. THIELE and FRANKE. The preparation of an aminoalcohol of the diacetylene series. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 553) Dec 1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A diacetylenamino alcohol can be obtained (1) from the reaction of 1-diethylamino-penta-2,4-diyne in acetone with caustic potash in ether or (2) from the reaction of 2-methyl-hexa-3,5-diyn-2-ol with a solution of water, glacial acetic acid, cuprous chloride and methylol-diethylamine. In German.

PB L 35192. SEEMANN and FRANKE. Condensation of alkoxyvinylacetylene with carbonyl components. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 908) Dec 1942. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report describes the preparation of the "enynol-ether EA" (2-methyl-3-hexyne-5-en-2,6-diol-6-ethylether) the "enynolether EB" (2-methyl-4-heptyne-6-en-3,7-diol-7-ethylether) and "enynolether EL" (1-nitrilo-3-methyl-4-heptyne-6-en-3,7-diol-7-ethylether). Furthermore, hydrogenation- and hydrolysis products of these ethers are indicated such as "Butinal A" 95-methyl-5-hydroxy-3-hexyn-1-al) and "Butinal B" 95-hydroxy-6-methyl-3-heptyn-1-al). In German.

PB L 35193. THIELE and FRANKE. The reaction of diacetylene with methylolamines. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 569) Dec 1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a correction of a previous report (PB 35180) in which one of the byproducts of the reaction of diethylamine with formaldehyde was stated to be "diaminoäthylen. It was later found to be "diaminomethylen," $(C_2H_5)_2N\text{-}CH_2\text{-}N\text{-}(C_2H_5)_2$. A number of other condensation products of formaldehyde with this diaminomethylene formed a top layer. These were separated by distillation. Analyses of these fractions are given in a table. In German.

PB L 35194. FRANKE. Report on the processing of higher acetylenes. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 623) Dec 1942. 10 f. Price: Microfilm-$1.00 - Enlargement Print- $1.50
A mixture of acetone and diacetylene, diluted to 30% to avoid danger, in 50% potassium hydroxide immediately forms the solid alkali salt of the diynediol, which floats on top. Wartime shortage of acetone caused its replacement by aldehydes. A number of reactions are mentioned which were still in the experimental stage. Two flow charts, one of which is partly illegible, show possible products. In German.

PB L 35195. THIELE and FRANKE. The preparation of amino alcohols of the diacetylene series and their hydrogenation products. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 909) Dec 1942. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report describes the condensation of "monamindia" with acetone, which supplements PB 35191; with isobutyraldehyde; with acetophenone; with 2-ethyl hexanol; and with levulinonitrile. It is stated that these are preliminary methods subject to further research. In German.

PB L 35196. MAY and FRANKE. The reactivity of acetylene and of propargylalcohol compared with that of diacetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 621) Dec 1942. 5 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Two methods were used for the reaction with aldehydes and ketones, producing the corresponding diacetylene glycol (diynediol). One method uses ether solution and solid caustic potash, the other uses 50% potassium hydroxide. As described in detail and shown in a table, diacetylene reacts more readily than acetylene; propargylalcohol is also more reactive than acetylene but more on the order of acetylene than diacetylene.
In German.

PB L 35197. ZACHERL. Gas mixture of n-butane, monovinylacetylene and diacetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 470) Jan 1943. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a report on distillation experiments. Separation of the components by the method used was not possible. Research was being continued. Two graphs are included.
In German.

PB L 35198. MAY and FRANKE. Experiments for the direct reaction of acetone with diacetylene which is contained in crude acetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 620) Apr 1943. 8 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Special equipment was developed for this reaction which is illustrated in a diagram. Experiments were also carried out to study the influence of temperature, throughput and stirring. In German.

PB L 35199. WEISSBACH and FRANKE. The condensation of diacetylene with isobutyraldehyde under the influence of alcoholic potassium hydroxide solution. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 618) May 1943. 3 f.
Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report deals with experiments on the reaction of pure diacetylene (about 90%) with isobutyraldehyde in the presence of ethanol-potassium hydroxide solution and methanol-potassium hydroxide. The condensation in alcohol is somewhat slower than that in aqueous caustic solution. On further treatment of the product 2,9-dimethyl-4,6-decadiyne-3,8-diol is obtained. In German.

PB L 35200. SCHÜLLER. The determination of higher acetylenes with silver nitrate. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 460) Jun 1943. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
In mixtures of acetylenes the $CH{\equiv}C.R.C{\equiv}$ portion and $CH{\equiv}C.R$ portion can be determined by titration with $AgNO_3$. The results agree with the results obtained by fractional distillation within the permissible limits of error. The determination of diacetylene in mixtures by fractional distillation and spectral analysis shows identical values. One frame is completely illegible.
In German.

PB L 35201. THIELE. An example of the continuous, selective reaction of diacetylene besides other acetylene- and other hydrocarbons with methylclamine. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 617) Jun 1943. 2 f.
Price: Microfilm-$1.00 - Enlargement Print-$1.50
Equipment was developed for a better yield of 5-diethylamino-penta-2,4-diyne and 1,6-bis-diethylamino-hexa-2,4-diyne. An oily and an aqueous portion is extracted from the reaction product. The former is degassed (the gases being vinylacetylene and residual hydrocarbons) and then separated into the above compounds. In German.

PB L 35202. FRANKE and WEISSBACH. Detonating experiments with diacetylene and diacetylene containing mixtures. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 608) Oct 1943. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a brief note on experiments in which various detonating caps were used. In German.

PB L 35203. SEEMANN and FRANKE. Condensation of methoxy-vinylacetylene with carbonyl compounds. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 609) Oct 1943. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Methoxyvinylacetylene, ethoxyvinylacetylene, and butoxyvinylacetylene were condensed with acetone, isobutyraldehyde, acetophenone and levulinonitrile, under varying conditions, in order to compare their reactivity. These proved to be approximately equal. The yield decreases as the length of the alkyl group increases. Best results were obtained in ether with caustic potash, or with sodamideas catalyst. The results are tabulated, and the experiments described in detail. In German.

PB L 35204. SEEMANN and FRANKE. The reaction of methyl alcohol and diacetylene without pressure. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 610) Oct 1943. 2 f.
Price: Microfilm-$1.00 - Enlargement Print-$1.50
In order to reach the required temperature without pressure a solvent with sufficiently high boiling point was needed. Butoxyvinylacetylene proved best for this purpose, as the reaction product could easily be separated by distillation. A continuous process remained to be worked out. In German.

PB L 35205. ZACHERL. Analysis of the condensates from the refrigeration installation. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 457) Oct 1943. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report deals with distillation of the acetylenes at low temperatures. The composition of the different fractions is described in detail. Only part of this report is legible. In German.

PB L 35206. WEISSBACH and FRANKE. Some detonation experiments with higher acetylenes. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 607) Nov 1943. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Even solid acetylene at 80°C could be detonated by a fuse. This pure diacetylene must be considered an explosive whether gas, liquid or solid. Only the crude condensation product obtained at 80°C. seems to be more stable, but this may depend on its composition and other conditions.
In German.

PB L 35277. I.G. FARBENINDUSTRIE. Processing the higher acetylenes. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 627) Jun 1943. 11 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
It is difficult to separate the higher acetylenes from each other by fractional distillation, nor is it advisable, because of the explosive dissociation of diacetylene. Therefore diacetylene is removed by chemical reactions: by carbonyl compounds hydrogenated to the corresponding 1,6-glycols; or addition of alcohol to alkoxyvinylacetylenes, which may be hydrogenated or processed otherwise. The remainder of the mixture consists of methyl- and vinylacetylene, which may be hydrated to acetone and butenone. In German.

PB L 35208. FRANKE. Experiments for the addition of water to methylacetylene and vinylacetylene. (Part of Rubber Reserve Microdilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 600) Jun 1943. 10 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The starting material for the reaction, methylacetylene and vinylacetylene should contain as little diacetylene as possible. Washing with pyridine removes diacetylene best. Other amines which can be used instead of pyridine are indicated. Other experiments deal with the control of the catalyst solution (its Fe- and Hg- content, H_2SO_4-concentration, and temperature), throughput of catalyst-solution and gas through the column, separation, purification and analytical determination of the ketones. Four tables are attached. One frame is illegible. In German.

PB L 35209. GRIMM. Large-scale purification of carbide acetylene with special regard to the production of acetaldehyde and ethylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 115) Jul 1944. 18 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Methods and materials are described which are used to free the raw materials for the production of carbide acetylene from compounds which contain S,P,N,Si,As,H, and CO. Several frames are not very ligible. In German.

PB L 35210. I.G. FARBENINDUSTRIE, A.G. Air raid protection measures for gas containers for acetylene and butadiene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 126) Jul 1944. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This brief report describes counter measures which were developed after a land mine exploded in the vicinity of the containers. The first frame is illegible. In German.

PB L 35211. MERKEL. Results of acetylene purification at Ludwigshafen. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 116) Jul 1944. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Purpose of these experiments, the results of which are described in this report, was to determine the degree of purity of acetylene obtained by the Piesteritz-type gasifier which was to be installed at the Ludwigshafen plant. In German.

PB L 35212. RETTER and FRANKE. The reaction products of diacetylene with isovaleraldehyde, isohexylaldehyde and levulinonitrile. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 616) Aug 1944. 9 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Experiments for the following reactions are described: (1) Preparation of 3,10-dimethyl-dodeca-5,7 diyne-4,8-diol from diacetylene and isobaleric aldehyde; (2) preparation of 3,10-dimethyl-dodecane-4,8-diol from 3,10-dimethyl-dodeca-5,7-diyne-4,9-diol and methanol; and (3) preparation of 1,6-dimethyl-1,6-dicyano ethyl-hexa-2,4-diyne-1,6-diol from diacetylene and levulinonitrile. In German.

PB L 35213. WEISSBACH and FRANKE. The condensation of diacetylene with isobutyraldehyde in dilute aqueous alkali solution. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 597) Sep 1944. 1 f. Price: Microfilm-$1.00 - Enlargement-$1.50
The corresponding diacetylene alcohol ("monol") and diacetylene glycol are formed. In very dilute alkali "monol" is formed almost exclusively. Increasing the alkali concentration increases the percentage of the glycol; at 50% alkali concentration, 85% of the glycol form is produced. In German.

PB L 35214. FRANKE. The condensation of diacetylene with acetone in dilute aqueous alkali solution. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 595) Oct 1944. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
"Monol" (the corresponding diacetylene alcohol) and diynediol are obtained in varying proportions, depending on the conditions. The percentage of diynediol increases with the concentration of alkali, temperature, and duration of the reaction. An excess of acetone is necessary to get enough diacetylene to take part in the reaction. Results are tabulated. In German.

PB L 35215. FRANKE. Further experiments on the addition of water to methyl and vinyl acetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 594) Oct 1944. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A comparison is made of the results obtained with different catalysts at various temperatures. The results are tabulated. In German.

PB L 35216. MAY and FRANKE. Preparation of substituted butynols. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 593) Oct 1944. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
It as planned to use alkyl-substituted butadienes as copolymers in order to obtain softer types of Buna. A number of experiments were carried out to obtain such substituted butadienes. The results, however, were largely negative. Seven experiments are described. In German.

PB L 35217. MAY and FRANKE. Addition of alcohol to diacetylene without use of pressure. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 592) Oct 1944. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This paper describes the experimental preparation of (1) ethoxyvinylacetylene ("Liptol A") and of (2) methoxyvinylacetylene ("Liptol M"). The products are obtained by the reaction of (1) alcohol and (2) methanol with diacetylene in alkali solution. Yields were only 53% and (2) 56% of theory due to partial polymerization. Results obtained are tabulated. In German.

PB L 35218. FRANKE and MAY. Supplementary experiments for the direct reaction of the diacetylene contained in the crude acetylene with acetone. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 626) Nov 1944. 5 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Two diagrams and two tables illustrate equipment and results of experiments which were carried out in continuation of work reported earlier. (see PB 35198). In German.

PB L 35219. REPPE. Progress in acetylene chemistry at the Ludwigshafen plant. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 922) Jul 1940. 46 f. Price: Microfilm-$1.25 Enlargement Print-$5.00
New reactions of acetylene are surveyed, among them the preparation of vinylether, polyhydroxystyrene, vinylesters of higher fatty acids, vinysulfides, vinylamines, aminobutynes, and alkynols. In German.

PB L 35220. REPPE. Special characteristics of Reppe's butadiene process. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 915) Jul 1944. 9 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report gives a detailed description of the chemistry of the reaction, the catalysts, the plant layout and its operation. Two diagrams are included. In German.

PB L 35221. REPPE. Various tables and graphs. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 921) n.d. 11 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a set of 10 flow-sheets and diagrams which illustrate Reppe's butadiene process and products obtained by reaction with acetylene as described in PB 35219 and 35220. Two charts are illegible. In German.

PB L 35222. WIEDEMANN. Hydrogenation of acetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 952) n.d. 28 f. Price: Microfilm-$1.25 - Enlargement Print-$3.00
Layout and operation of the hydrogenation-installation #662 at the Hüls plant are described. Several frames are illegible. In German.

PB L 35223. ZOBEL. The purification of arc acetylene for the synthesis of aldehyde. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 961) Jul 1944. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The usual impurities are listed. Two physical methods were developed for purification, washing with oil or freezing. Both methods are described and illustrated by diagrams. In German.

PB L 35224. BAUMANN and others. The present status of production and processing of arc acetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 960) May 1945. 128 f. Price: Microfilm-$2.25 - Enlargement Print-$13.00
This is a detailed survey of the entire field. Part I deals with the history of the process, its theory, apparatus used, results and prospects, comparison of the electric arc process with other methods, and D.C. supply. Part II reviews the purification of the products, chemical processing of the acetylene, synthesis of butodiene from acetaldehyde, production of acetone, acetonitrile, ethylene ethylenediacetate, chlorination products of acetylene, sodium acetate, vinyl chloride, butadiene from vinyl-acetylene, and acetylene carbon black. A "family tree" shows all the products obtained from acetylene. A number of diagrams, graphs and tables are included. Legibility of much of the report is poor. In German.

PB L 35225. BAUMANN. Recent results of the arc acetylene process. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 963) Apr 1945. 10 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report describes the arc process, the processing of the acetylene and diacetylene and the production of various byproducts such as carbon black, hydrocyanic acid, a polymer as a rubber binder, higher acetylenes, and aromatic substances. Also mentioned is the production of hydrogen sulfide from natural gas, to be used in the preparation of bisulfite. One frame partly illegible. In German.

PB L 35226. WEIDERT. Description of the plant for the production of acetylene including the production of carbon black and low pressure gas purification. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 962) Apr 1945. 5 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Tables give the composition of the gases used in the electric arc acetylene process as well as the composition of the reaction products. Carbon black production is described. A flow diagram for the purification of gases for carbon black production is included. In German.

PB L 35227. KRECKE and ROH. Study of the alkylation of benzene with ethylene with regard to a preferential production of diethylbenzene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 86) Aug 1941. 14 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The reaction of 3 parts of benzene (by volume) with 1000 parts of 100% ethylene gave the best yield of mono- and diethyl benzene with the least byproducts. The reactions of higher alkylation products are also discussed. A portion of the text and a few tables are not very legible. In German.

PB L 35228. MEIS. Instructions for the production of styrene phenol. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 536) Jul 1942. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A mixture of 520 parts of styrene and 470 parts of phenol is heated to 55-60°C in 1500 parts of xylene. At this temperature 60 parts of an active alumina is introduced with stirring. The reaction mixture is kept at 100° for several hours. Upon further treatment, 123 parts of a soft resin are obtained. In German.

PB L 35229. KRECKE and ROH. Experiments for the promylation of benzene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 85) Nov 1942. 16 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Use of aluminum chloride as catalyst gives a better yield of mono-isopropylbenzene than use of 96% sulfuric acid. Other experiments deal with the ethylation of toluene and chlorobenzene. Partly illegible. In German.

PB L 35230. BRAUCHER. The latent period of styrene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 465) 20 f. Price: Microfilm-$1.00 - Enlargement Print-$2.00
Determination of the latent period of the styrene polymerization makes it possible to judge the homogenity of the starting material or the content of impurities. Partly illegible. In German.

PB L 35231. I.G. FARBENINDUSTRIE A.G. Report on basic computations for continuous distillation at high velocities and strong turbulance. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 436) Apr 1943. 9 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Formulas are developed which can be used for computing the removal of styrene from buna-latex. One diagram and four graphs are attached. In German.

PB L 35232. I.G. FARBENINDUSTRIE A.G. Preparation of bistyryl. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 43) Feb 1944. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report describes plant and cost outlay for the handling of a hydrocarbon mixture of styrene and ethylbenzene in the ratio 2:3 with 71% sulfuric acid at 100°C. In German.

PB L 35233. I.G. FARBENINDUSTRIE, A.G. The determination of styrene in ethylbenzene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber

Reserve Rept 132) Mar 1944. 176 f. Price: Microfilm-$2.75 - Enlargement Print-$18.00
The title refers only to one of many documents contained herein. They are mostly short, uninformative internal records, concerning some phase of styrene processing or testing, business correspondence, contracts, calculations etc. Some are illegible. In German.

PB L 35234. BIEDENKOPF. Investigations in the field of distillation within the scope of the research group for distillation techniques and their significance for practical application. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 123) Jul 1944. 23 f. Price: Microfilm-$1.00 - Enlargement Print-$2.50
The theoretical aspects of distillation are discussed. Formulas, tables and graphs illustrated the discussion. Various improvements in apparatus are described and illustrated. In German.

PB L 35235. ROH. The status of benzene refining and of the ethylbenzene styrene process at Hüls. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 129) n.d. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The methods used at Hüls are described and illustrated by flow charts and tables. Legibility is poor. In German.

PB L 35236. SCHAFER. The status of styrene and ethylbenzene production at Schkopau. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 130) Aug 1944. 14 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The Schkopau procedure is illustrated by means of drawings and tables. The report describes how certain difficulties were overcome and how better economy might be achieved. In German.

PB L 35237. WINKELER. The distillation of ethylbenzene at Schkopau. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 1) n.d. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The Schkopau installations are described in detail, giving exact measurements, capacity, etc. Results were not as yet satisfactory. Difficulties and intended counter measures are outlined. Poor legibility. In German.

PB L 35238. WINKELER. The distillation of styrene at Schkopau. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 2) n.d. 13 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Styrene is obtained by catalytic dehydrogenation of ethylbenzene at 600°C. The plant equipment and its operation is described in detail. Three diagrams are included. Poor legibility. In German.

PB L 35239. I.G. FARBENINDUSTRIE, A.G. Benzene refining. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 764) Apr 1945. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The crude benzene is treated in the first stage with 3% of an 80 weight percent sulfuric acid, in the second stage with 3% of 96 percent sulfuric acid, in the third stage it is neutralized with sodium hydroxide and in the fourth stage washed with "Wofatit"-water ("Wofatit" is an ion-exchanger based on artificial resin). Thereafter the refined benzene is distilled. A flowsheet, which is not very legible, is included. In German.

PB L 35240. I.G. FARBENINDUSTRIE, A.G. Ethylbenzene production. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 765) Apr 1945. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a detailed description of equipment for the production of ethylbenzene from benzene and ethylene with aluminum chloride as catalyst and for its subsequent distillation. Three flow-sheets are attached. In German.

PB L 35241. I.G. FARBENINDUSTRIE, A.G. Production and distillation of styrene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 766) Apr 1945. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Plant equipment and operational details for the production and distillation of styrene by dehydrogenation of ethylbenzene are described. One flow-sheet (illegible) is attached. In German.

PB L 35242. I.G. FARBENINDUSTRIE, A.G. Ethylene oxide production and distillation. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 769) Apr 1945. 10 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Plant equipment and technical data for the production and distillation of ethylene oxide is described. Ethylene is reacted with chlorine to ethylene chlorhydrin, ethylene chloride and $\beta\beta$ -dichloro-diethylether. Ethylene chlorhydrin is converted to ethylene oxide by treatment with milk of lime. Poor legibility. In German.

PB L 35243. I.G. FARBENINDUSTRIE, A.G. Styrene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 951) Jul 1945. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This brief note describes two analytical methods: (1) determination of the latent period of polymerisation and (2) determination of the divinylbenzene-content. In German.

PB L 35244. STEINHOFER. Development and testing methods for the catalysts used in the Reppe process. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 916) Jul 1945. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The development of a butyne-diol catalyst, of a butanediol catalyst and a butadiene catalyst is described. Only for the butadiene catalyst is it possible to ascertain its usability by means of laboratory analysis and X-rays. As to the two other catalysts, only their mechanical properties can be tested. Two graphs are included. In German.

PB L 35245. KNEPPER. Discussion on coke breeze. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 25) Jun 1941. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a brief note dealing with supply-problems. Poor legibility. In German.

PB L 35246. BUR. Preliminary communication on the planned production of catalysts for styrene within the limits of the present plant for the production of butadiene catalysts. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 10) Aug 1941. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A monthly production of 10 tons of catalyst was planned, composition of which and method of preparation are described in this report. Partly illegible. In German.

PB L 35247. BUB. Supply of coke catalyst for November 1941. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 24) Oct 1941 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a brief letter in which scarcity of raw materials is stated. Partly illegible. In German.

PB L 35248. BUB. Utilization of spent styrene catalyst. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 23) Nov 1941 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a copy of a letter suggesting the recovery of the 80% zinc oxide contained in the catalyst. Poor legibility. In German.

PB L 35249. BUNA WERKE G.M.B.H. Styrene catalyst. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 13) Feb 1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This letter, addressed to Hüls, reports difficulties experienced with the catalyst and asks for advice. Partly illegible. In German.

PB L 35250. BAUMANN and BUB. Styrene catalyst. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 12) Feb 1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is the reply to the letter reported under the previous PB number. Writers believe the difficulties to be due, not to faulty catalyst, but to the sulfur content of the benzene used. A meeting was arranged to deal with the problem. Partly illegible. In German.

PB L 35251. BUB. Report on a conference. (Part of Rubber Reserve Microfilm Reel 5941-2, PB 13322) (Rubber Reserve Rept 11) Apr.1942. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The following subjects were discussed at the meeting held at I.G. Ludwigshafen on March 27-28, 1942: (1) Styrene catalyst. Possible reasons for the deterioration of the catalyst were given, and remedies suggested. (2) Waste of aluminum chloride. Difficulties were attributed to the presence of titanium. (3) Butadiene synthesis. A new method is mentioned, but not described. (4) Duty on ethyl benzene. This was a report on negotiations with the customs officials. Poor legibility. In German.

PB L 35252. I.G. FARBENINDUSTRIE, A.G. Treatment of the spent styrene catalyst Lu 82, for recovery of zinc oxide. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 78) Jul 1943. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50.
The catalyst is dissolved in hydrochloric acid. Aluminum and chromium are precipitated as hydroxides calcium as sulfate. From the zinc chloride solution zinc oxide is prepared which still contains 1% of calcium oxide and traces of aluminum oxide. This zinc oxide may again be used for styrene catalyst production. In German.

PB L 35253. I.G. FARBENINDUSTRIE, A.G. Coke catalyst. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 15) Sep 1943. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Preparation and properties of the catalyst are described. The text is partly illegible. In German.

PB L 35254. OHLINGER. The development of the new styrene catalysts. III Plant equipment and maintenance (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 128) Jul 1944. 13 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The development of the two catalysts "Lu 82" and "Lu 144 G" and styrene yields obtained by their use are described in this report. Both consist of zinc oxide (82-85%), aluminum oxide (3-6%), calcium oxide (5%), potassium chromate (3%) and potassium sulfate (2-3%). Potassium hydroxide (2%) is used in "Lu 82," which is replaced by magnesium oxide (5%) in "Lu 144 G." One flow-sheet is attached which deals with the utilization of the dehydrogenation gas. In German.

PB L 35255. I.G. FARBENINDUSTRIE, A.G. Detail drawing of butadiene contact oven. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 634) Mar 1937. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
These two sheets are almost illegible and will not reproduce well. In German.

PB L 35256. BAYERISCHE STICKSTOFFWERKE. Flow sheet of gas flow carbide furnace. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 925) Mar 1937. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a drawing of the suction gas removal installation of the Bayerische Stickstoffwerke at Schkopau.
In German.

PB L 35257. SIEMENS & HALSKE. Liquid level indicator in pressure vessels based on the float principle. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 658) n.d. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The construction and application of an electrical level indicator manufactured by the Siemens and Halske A.G., is described in this pamphlet. In German.

PB L 35258. I.G. FARBENINDUSTRIE, A.G. Three drawings apparently for use in the butadiene plant, Chemische Werke Hüls. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 659, 501) Rept 659 - n.d. Rept 501 - Apr 1943. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
These are three drawings, described in the index as: (1) Blueprint of diaphragm pump; (2) Drawing of aldehyde generator with dimensions; (Hüls); (3) Blueprint of? (Leverkusen). The drawings do not contain any further explanation and are largely illegible.
In German.

PB L 35259. WEISE, SOHNE, HALLE. Foundation of a butadiene pump. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 675) n.d. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Drawing is partly illegible. In German.

PB L 35260. SIEMENS & HALSKE. Meters for all kinds of liquids. Part I: Dial indicator. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 679) n.d. 39 f. Price: Microfilm $1.25 - Enlargement Print-$4.00
This is a pamphlet of the Siemens & Halske firm. Diagrams and description are given. In German.

PB L 35261. CHEMISCHE WERKE HÜLS. Blue print of a butadiene compressor. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 654) n.d. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Legibility of the blueprint is very poor. In German.

PB L 35262. CHEMISCHE WERKE HÜLS. Performance of the catalyst furnaces of the butadiene plant. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 83) Apr 1944. 8 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Results with furnaces of different types are tabulated and compared. A graph showing production and use of materials is not very clear. Part of the text is also illegible. In German.

PB L 35263. SAUERWEIN. The butadiene furnaces at Hüls. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 120) Jul 1944. 11 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The report deals with difficulties which were experienced with the butadiene furnaces. A chart shows the performances of the different furnaces. Four photographs are included. In German.

PB L 35264. CHEMISCHE WERKE HÜLS. Description of the aldehyde plant. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 413) Feb 1945. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a description of the individual phases of aldehyde production. The starting substance, acetylene, is transformed into acetaldehyde by the use of acidic mercury catalyst. The crude aldehyde is rectified in four columns. The acetylene is recovered and purified. The catalytic acid is processed to nitric acid. Byproducts of the process are acetic acid and acetone. A flow sheet illustrating the synthesis and distillation of the aldehyde and the distillation of acetone is attached. One frame is not very legible. In German.

PB L 35265. I.G. FARBENINDUSTRIE, A.G. Four technical drawings. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 414, 934, 932) 1945. 8 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Two flowsheets from the Lichtbogen Russfabrik NDGR deal with the use of wash oils ("Waschöl B" and Kogasin) in acetylene production and low pressure gas purification. Two other flowsheets deal with gas compression and oil purification in the dehydrogenation of n-butane. The text is completely illegible and the drawings also are not very legible. In German.

PB L 35266. I.G. FARBENINDUSTRIE. Flow sheet for the production of monovinyl acetylene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 946) 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is a rough flow sheet of the manufacture of monovinyl acetylene. No name or company given. In German.

PB L 35267. CHEMISCHE WERKE HÜLS. Drawing of the reaction tower for the alkylation of benzene to ethylbenzene. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 631) Nov 1938. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Two illegible drawings are presented. No German legend corresponding to the above title can be seen.

PB L 35268. CHEMISCHE WERKE HÜLS. Three technical drawings of plant equipment. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 629, 630, 674) 1938-1939. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Drawings are presented of (1) a styrene decanter, (2) styrene oven, and (3) tube layout of the contact furnace (styrene production). None of the drawings are very legible. In German.

PB L 35269. CHEMISCHE WERKE HÜLS. Disturbances in the ethylbenzene plant. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 81) Nov 1944. 10 f. Price: Microfilm-$1.00 / Enlargement Print-$1.50
This is a detailed discussion of operational difficulties in an ethylbenzene plant judged from the physical and chemical disturbances in the circulation of the catalyst. The unwanted formation of hexmethylbenzene was investigated. A table and graphs are included. Legibility of a portion of the text is poor. In German.

PB L 35270. I.G. FARBENINDUSTRIE, A.G. The measuring and controlling installations for the distillation processes in the Schkopau plant. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 5) Nov 1940. 21 f. Price: Microfilm-$1.00 - Enlargement Print-$2.50
This document describes the various types of instruments in use at the butadiene plant at Schkopau. Photographs (these are not legible) and flow diagrams are included. In German.

PB L 35271. I.G. FARBENINDUSTRIE A.G. Three technical drawings of plant equipment. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 660, 662, 661) n.d. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Two drawings are presented of persulfate pumps. A third drawing is of a rocker arm plunger pump built by Maschinenbau A.G. Balcke, Frankenthal (Rheinpfalz). In German.

PB L 35272. DENNSTEDT. Description of a machine for filling bottles (with liquid butadiene) and directions for its use. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 850) Jun 1941. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The text is not very legible. A piping diagram of the apparatus is included. In German.

PB L 35273. I.G. FARBENINDUSTRIE, A.G. Two technical drawings of plant equipment. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 664, 649) 1944. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Two drawings are presented. One is of a "Spritzkopf" (use not given) and the other appears to be that of a casing for a roller bearing. Legibility of drawings is very poor. In German.

PB L 35274. DENUSTEDT. The construction of an injection pump for activators, regulators or antioxidants for Buna polymerization. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 847) Jan 1942. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A letter describes the characteristics of an injection pump which is considered suitable for handling small quantities of material and whose valve could satisfactorily handle pressures up to 300 atmospheres. A sketch of the pump is included. In German.

PB L 35275. CANZLER, CARL. Drawing of a kettle with stirring equipment. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 665) n.d. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Details of the equipment are not very legible. No description is given. In German.

PB L 35276. CHEMISCHE WERKE HÜLS. Plant experiences with continuous distillation. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 92) Feb 1944. 13 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
It was stated that the continuous distillation has proved its efficiency even under difficult conditions during long periods of operation. Drawings of equipment are included. Both text and drawings are largely illegible. In German.

PB L 35277. SIEMENS-SCHUCKERTWERKE. Elmo pumps as vacuum pumps and compressors. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 656) n.d. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Advertising matter with a brief description of the pumps. The pumps are circulating pumps. The apparatus can produce a vacuum of 99.5% or pressures up to 3 atmospheres. A photograph and drawing are included. In German.

PB L 35278. CHEMISCHE WERKE HÜLS. Photos of various plant installations. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 93) n.d. 9 f. Price: Microfilm-$1.00 -Enlargement Print-$1.50
These are photographs of various sections of the installation used in butadiene and Buna S production. There is no descriptive text. The photographs are not very clear, and some are entirely blurred. In German.

PB L 35279. CHEMISCHE WERKE HÜLS. Various technical drawings of plant equipment. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 668, 673, 676, 652, 670) n.d. 8 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Several detail drawings are presented showing parts of the I.G. Hüls plant for making Buna. None of the drawings are legible or clearly identified. One drawing appears to be related to the vacuum tower and the other is labeled "missing measurements for Drawing H 625-2," a drawing of a rocker arm pump. In German.

PB L 35280. TWO pamphlets on centrifugal pumps. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 678, 677) n.d. 12 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
One pamphlet describes the performance of Siki self-priming Type A circulating pumps, and the other pamphlet describes Asmag-Hilpert-Pegnitzhutte A.G. Nurnberg pumps ("Kanalrad-Schleuderstoffkreiselpumpen Type KW"). In German.

PB L 35281. I.G. FARBENINDUSTRIE, A.G. Photographs of plant operations in Schkopau. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 55) n.d. 33 f. Price: Microfilm-$1.25 - Enlargement Print-$3.50
Approximately 60 photographs are presented of the Schkopau plant for making Buna rubber from butadiene via butylene glycol. The photographs are illegible and will not reproduce well.

PB L 35282. SIEMENS & HALSKE. Dial indicator for fuels, lubricants, solvents, etc. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 657) n.d. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This pamphlet of the above firm is illustrated with drawings and tables. In German.

PB L 35283. HILBURG, (SCHKOPAU). Experiences with Siemens-Halske dial indicators for pressures up to 300 atm. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 59) n.d. 6 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Two diagrams (one entirely illegible) illustrate the text. The text is also partly illegible. In German.

PB L 35284. WINKLER. Indicator for high pressures up to 300 atm. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 58) Jun 1944. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report describes experiences with a new high pressure indicator. The drawing of the indicator is not very legible. In German.

PB L 35285. HILBURG. Latex measurement by the principle of pressure differential. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 63) n.d. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The Venturi tube used for measuring quantities of later by the principle of the pressure differential was improved by the installation of a diffusor. Structural and operational details and experiences with the new appliance are included. A diagram is attached. In German.

PB L 35286. I.G. FARBENINDUSTRIE, A.G. The use of the Leonard control equipment for the processing of Buna. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 67) Jun 1944. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report describes experiences with a new type of regulator used for the drives of Buna-processing equipment. A description of the appliance and a table of costs are included. In German.

PB L 35287. WINKLER. Control of the latex flow during polymerization. (Part of Rubber Reserve Microfilm Reel 5941-2, PB 13322) (Rubber Reserve Rept 68) Jun 1944. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The German title and text of this report are completely illegible. Only 3 diagrams are fairly clear. In German.

PB L 35288. WITTE. The most recent status of standardization of flow meters. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 62) n.d. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This report deals with (1) measures for the standardisation of Venturi nozzles and of a ring chamber for determining pressure; (2) standardization of throttle devices; and (3) measurements regarding the minimum diameter of tubes with effective head. Four graphs are included. In German.

PB L 35289. WALKER. Experiences with various level indicators. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 61) n.d. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The I.G. not having been satisfied with the rotameters on hand, built their own rotameters from glass tubes supplied by Schott. Their experiences with these rotameters and other flowmeters such as the "Siemens" and "Debro-differential pressure meter" are described. Several drawings are included. In German.

PB L 35290. EBBINGHAUS. Further development of the magnetic O_2 recorder for various ranges of measurement.

with a permanent magnet instead of an electromagnet. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 65) Jun 1944. 10 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The report describes results with both an electromagnet and a permanent magnet. Several drawings are included. In German.

PB L 35291. HENGSTENBERG. Measurements and control of volume by means of dial indicators. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 60) Jun 1944. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This brief memorandum states that the apparatus provided by Siemens is the best available for the purpose (used in the production of Buna). In German.

PB L 35292. PETER DINCKELS and SOHN. Drawings of tubular coolers in an aldolisation unit. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 635) Dec 1937. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Two detail drawings are presented. These are partly illegible. In German.

PB L 35294. I.G. FARBENINDUSTRIE, A.G. Drawings and flow sheets for the production of Buna. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 933, 935, 927) 1945. 6 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A flow sheet covers the continuous processing of Buna S-latex. Two other flow sheets illustrated Buna S and Buna S3 production. A rough flow sheet (barely legible) illustrates Buna 85 production. Another drawing is completely illegible. In German.

PB L 35295. WALKER. A high pressure differential manometer and liquid level for indicating and recording. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 66) n.d. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The construction of these devices is described. Five small sketches, some of which are illegible, illustrate the report. In German.

PB L 35296. CHEMISCHE WERKE HÜLS. Five technical drawings and flow sheets for the production of Buna. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 638, 653, 667, 931) 1944. 5 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Drawings are presented of the latex filter, work finishing (precipitating closet), and conveyer system. A flow diagram illustrates the copolymerization of butadiene and styrene. In German.

PB L 35297. HAAG. Distillation of "butol" (butanediol) with byproducts. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 774) Apr 1945. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The report gives the composition of crude and distilled "butol" and the percentage of byproducts recovered by continuous distillation. A flow diagram (not very legible) illustrates the recovery of the byproducts. In German.

PB L 35298. I.G. FARBENINDUSTRIE, A.G. Two flow sheets. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Repts 666, 947) 1945. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A flow diagram for chloroprene manufacture is presented. A second drawing (almost completely illegible) illustrates oil circulation at the HIGA plant (process not given). In German.

PB L 35299. CHEMISCHE WERKE HÜLS. List of machinery and apparatus in the testing station for Hüls Buna 142. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 781) Apr 1945. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A floor plan to indicate the position of the machinery is included. In German.

PB L 35300. I.G. FARBENINDUSTRIE, A.G. A technical drawing of equipment. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 647) n.d. 1 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Drawing of an unspecified piece of equipment. In German.

PB L 35301. VEREIN DEUTSCHER INGENIEURE-VERLAG. VDI - standard instructions: Shaping and utilization of rubber parts. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 731) May 1941. 24 f. Price: Microfilm-$1.00 - Enlargement Print-$2.50
This illustrated pamphlet contains instructions concerning the manufacture, properties and selection of rubber types; methods of manufacturing half-finished and finished products; tolerances and shrinkage of rubber parts; basic rules for shaping soft rubber parts; and shorage and care of rubber. Directions for testing rubber are included. In German.

PB L 35302. DREYER, ROSENKRANZ and DROOP, HANNOVER. Directions for use of the large deformation-measuring apparatus, of Continental design. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 756) n.d. 32 f. Price: Microfilm-$1.25 - Enlargement Print-$3.50
This apparatus is used for determining deformation properties of synthetic rubber and allied products. Detailed information on the principles, operation and care of the apparatus is given in this pamphlet (in German). Photographs and a diagram illustrate the text. An English translation (by the Firestone Tyre and Rubber Company, Ltd.) is given, together with additional information obtained in further tests with the apparatus. Translation partly illegible.

PB L 35303. I.G. FARBENINDUSTRIE, A.G. Drawing for an autoclave. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 924) Mar 1941. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Drawing largely illegible. In German.

PB L 35304. WOLTHAN. "Spezivometer" of the Hydrospaltebauanstalt Düsseldorf. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 546) Jul 1939. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
This is an apparatus for measuring the specific gravity of butadiene-styrene mixtures. Several graphs are included. Report is not very legible. In German.

PB L 35305. MORGENSTERN. Substitution of the rubber lining in chlorine installation by "Vinidur" linings. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 91) Nov 1943. 6 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The report describes attempts to bond Vinidur linings to the metal parts of chlorinators. Methylene- and ethylene chloride were found to be suitable for this purpose. The vinidur linings gave satisfactory service. The report is not very legible. In German.

PB L 35306. MEISSENHEIMER. Defects of rubber linings in the aldehyde plants. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 90) Oct 1943. 7 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
The rubber lining of reactors for the aldehyde synthesis has to withstand the action of acetylene, water vapor and aldehyde at 98°C. It was found that the reported deterioration of the rubber lining is to be attributed to defective Buna rubber linings and not to a chemical reaction as is the case in Buna lining of chlorinators. Much of the document is illegible. In German.

PB L 35307. STADELMANN. The cause of bubble formation in hard rubber linings of industrial equipment. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 89) Nov 1944. 4 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
It was found that water vapors diffuse through the hard rubber lining causing blistering and eventual rupture of said lining. Part of the report is illegible. In German.

PB L 35308. I.G. FARBENINDUSTRIE A.G. Static determination of weldability. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 319) Apr 1944. 1 f. Price: Microfilm-$1.00 - Enlargment Print-$1.50
Tests by the static method of testing the mechanical strength of welds of polymerization products are reported. The results of these tests do not agree with those obtained by dynamic testing. The static method however, has the advantage of greater speed and requires less material. In German.

PB L 35309. I.G. FARBENINDUSTRIE, A.G. Water supply at the Ludwigshafen Buna-plant with regard to emergencies. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 127) Jul 1944. 3 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
Various emergencies which would threaten the water supply are discussed. It was concluded that the favorable location of the plant on the Rhine precludes such fears. Report is partly illegible. In German.

PB L 35310. I.G. FARBENINDUSTRIE, A.G. Plan of site of the oppau plant. (Part of Rubber Reserve Microfilm Reel 5841-2, PB 13322) (Rubber Reserve Rept 680) n.d. 2 f. Price: Microfilm-$1.00 - Enlargement Print-$1.50
A map gives the location of the various plants which are identified by number only. In German.

PB L 86006. U. S. RUBBER BUREAU. General summary of production and use of reclaimed rubber in Germany. Aug 1945. 14 p. Price: Microfilm-$1.25 - Photostat-$2.00
The data appearing in this report was compiled by the United States members of the Mission of representatives from America, Canadian, and British Rubber Industries who investigated the German plants as soon as possible after the fall of Germany.

PB L 86956. U. S. TECHNICAL INDUSTRIAL INTELLIGENCE COMMITTEE. CHEMICALS SUBCOMMITTEE. Butadiene catalysts. Translation report. (Chemicals Rept 2). Oct 1945. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
A memorandum from Dr. Knepper, Catalyst Plant to Dr. Sauerwein, Butadiene Plant, Hüls, on a proposed change in the phosphoric acid content of the catalyst.

PB L 86961. U. S. TECHNICAL INDUSTRIAL INTELLIGENCE COMMITTEE. CHEMICALS SUBCOMMITTEE. Developing uses for the distillation residues from butadiene obtained by the Reppe synthesis. Translation report. (Chemicals Rept 11). Oct 1945. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
According to the "Reppe" process the following can be manufactured from the distillation residues of the butadiene: (A) by condensation with a little sulfuric acid - (1) butadiene resin (benzine soluble resin), (2) Carboresin C (drying oil) and (3) Carboresin P (Buna S-softener); (B) by blowing through air - (4) insulation medium T.R. (binding medium for camouflage colors); (C) by hydrogenation of the distillates which are discharged during the manufacture of items 1-3 or of the total butadiene residues - (5) solution medium, (6) C_{10}-alcohol which is suitable for the manufacture of softeners. The most simple and practicable utilization for the factory at present is for the manufacture of the insulation medium T.R., in peace-time perhaps for Carboresin P.

PB L 86959. U. S. TECHNICAL INDUSTRIAL INTELLIGENCE COMMITTEE. CHEMICALS SUBCOMMITTEE. Various studies on co-polymers and ingredients for co-polymerization. Translation report. (Chemicals Rept 7). Oct 1945. 13 p. Price: Microfilm-$1.25 - Photostat-$2.00
This report is made up of (a) Dr. Wolz's annual report for 1942 on various studies on co-polymers and ingredients for co-polymerization, and (b) two reports from dept. rubber central laboratory one by Becker on high pressure polymerization and the other by Dr. Wiesemann on iron salts as degradation catalysts.

MISCELLANEOUS

PB L 87363. U. S. WAR DEPARTMENT. Japanese-English technical terms dictionary. (Tech Manual 30-482). Nov 1945. 1042 p. Price: Microfilm-$7.00 - Photostat-$105.00

PB L 87209. U. S. WAR DEPARTMENT. Portuguese military dictionary: Portuguese-English, English-Portuguese. (Tech Manual 30-501) Aug 1944. 264 p. Price: Microfilm-$7.00 - Photostat-$27.00

PB L 86804. U. S. WAR DEPARTMENT. Rumanian: A guide to the spoken language. (Tech Manual 30-349). Dec 1943. 90 p. Price: Microfilm-$3.00 - Photostat-$9.00

PB L 81463. U. S. WAR DEPARTMENT. Spoken English, basic course - units 13-30. (Tech Manual 30-1510). Feb 1945. 485 p. Price: Microfilm-$7.00 - Photostat-$47.00
A manual designed as a textbook in aiding Spanish speaking persons in learning spoken English.

ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES

PB L 83283. REICHSPATENTAMT, BERLIN, GERMANY. German patent applications class 21g, electric and electromagnetic auxiliary devices. (FIAT Microfilm Reel B 98, Frames 3176-4193) 1933-1945. 1018 f. Price: Microfilm-$7.00 - Enlargement print-$103.00
This FIAT microfilm reel consists of 158 German patent applications as listed below. Individual items will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $7.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
3176-3186 PB L 83283	Vacuum tube, especially for ultrashort waves. Ger. patent application P 79 563 VIIIc/21g dated Aug 5, 1939. In German. Drawing.	$3.00
3187-3189 PB L 83283	PREUSS, R. (Inventor). Device for lowering the injurious oscillations of the earth's rays to those of body cells in human beings and animals. Ger. patent application P 79 577 VIIIc dated Aug 9, 1939. In German. Drawing.	2.00
3190-3200 PB L 83283	PORZELLANFABRIK KAHLA A.G., KAHLA-THÜRINGEN. Self-insulating high-voltage capacitor arrangement, particularly for high frequency purposes. Ger. patent application P 80 543 dated Mar 4, 1940. In German. Drawings.	3.00
3201-3209 PB L 83283	PHILIPS PATENTVERWALTUNG G.M.B.H., BERLIN. Vacuum tube and a circuit using the vacuum tube. Ger. patent application P 81 386 VIIIc/21g dated Oct 15, 1940. In German. Drawing.	2.00
3210-3215 PB L 83283	PHILIPS PATENTVERWALTUNG G.M.B.H., BERLIN. Vacuum tube. Ger. patent application P 81 458 VIIIc/21g dated Oct 31, 1940. In German. Drawing.	2.00
3216-3220 PB L 83283	SIEMENS & HALSKE A.G., BERLIN. Source of neutrons. Ger. patent application S 128 511 VIIIc/21g-35 dated May 16, 1939. In German. Drawing.	2.00
3221-3227 PB L 83283	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Electron microscope. Ger. patent application S 128 561 VIIIc dated Aug 26, 1937. In German. Drawings.	2.00
3228-3235 PB L 83283	SIEMENS & HALSKE A.G., BERLIN. Method for producing a dry-disk rectifier. Ger. patent application S 130 522 VIIIc/21g-11/02 dated Jan 22, 1938. In German. Drawings. Supplement to patent application S 125 869 VIIIc/21g.	2.00
3236-3240 PB L 83283	SIEMENS & HALSKE A.G., BERLIN. Capacitor with very thin electrodes. Ger. patent application S 124 563 dated Oct 15, 1936. In German.	2.00
3241-3253 PB L 83283	Vacuum tube, especially diode. Ger. patent application P 78 349 VIIIc/21g dated Dec 13, 1938. In German. Drawings.	3.00
3254-3258 PB L 83283	PORZELLANFABRIK KAHLA A.G., KAHLA-THÜRINGEN. Electric capacitors of ceramic material and production methods. Ger. patent application P 67 356 VIIIc/21g dated Apr 8, 1933. In German. Drawings.	2.00
3259-3263 PB L 83283	PORZELLANFABRIK KAHLA A.G., KAHLA-THÜRINGEN. Method for producing electric capacitors of ceramic materials. Ger. patent application P 67 652 VIIIc/21g 10/12 dated Feb 12, 1943. In German. Drawings.	2.00
3264-3270 PB L 83283	Vacuum tube for ultrashort electromagnetic waves. Ger. patent application P 79 550 VIIIc/21g dated Aug 3, 1938. In German. Drawings. Supplement to patent application P 78 911 VIIIc/21g 13/17.	2.00
3271-3273 PB L 83283	SCHMELLENMEYER, H. (Inventor). Arrangement for electron acceleration to very high speed by means of an electric rotating field. Ger. patent application Sch 129 394 VIIIc/21g 36 dated Jun 19, 1944. In German. Diagram.	2.00
3274-3280 PB L 83283	PORZELLANFABRIK KAHLA A.G., KAHLA-THÜRINGEN. Air capacitor made of ceramic disks. Ger. patent application P 74 230 dated Nov 30, 1936. In German. Drawings.	2.00
3281-3282 PB L 83283	POHL, E. (Inventor). Anode for vacuum tubes. Ger. patent application P 74 517 dated Mar 28, 1940. In German. Drawings.	2.00
3283-3284 PB L 83283	POHL, E. (Inventor). Rotary anode with lateral axis. Ger. patent application P 74 526/21g dated Mar 1, 1941. In German. Supplement to patent application P 73 839 VIIIc/21g.	2.00
3285-3286 PB L 83283	OPTA RADIO A.G., BERLIN. Arrangement for setting the frequency of ultrashort wave filters. Ger. patent application O 26 483 VIIIc/21g 34 dated Mar 15, 1944. In German.	2.00
3287-3293 PB L 83283	OPTA RADIO A.G., BERLIN. Ultrahigh frequency filter. Ger. patent application O 26 484 VIIIc/21g 34 dated Mar 15, 1944. In German. Drawings.	2.00
3294-3297 PB L 83283	OPTA RADIO A.G., BERLIN. Cathode-ray tube. Ger. patent application O 26 450 VIIIc/21g 4/05 dated Mar 3, 1944. Inventor: Wolff, H. In German. Drawing.	2.00
3298-3303 PB L 83283	OBERLÄNDER, H. (Inventor). Method for the production of rotors for variable capacitors. Ger. patent application O 26 228	

dated Sep 29, 1943. In German. 2.00
Drawings.

3304-3309 PB L 83283 OPTA RADIO A.G., BERLIN. Circuit arrangement for radial deflection of cathode-rays from a circular path without the use of concentric deflection electrodes. Ger. patent application O 26 229 VIIIc/21g dated Sep 29, 1943. Inventor: Weber, R. In German. 2.00
Diagrams.

3310-3318 PB L 83283 OBERLÄNDER, H. (Inventor). Variable capacitor. Ger. patent application dated Oct 12, 1943. In German. 2.00
Drawings.

3319-3323 PB L 83283 OPTA RADIO A.G., BERLIN. Circuit arrangement for radial deflection of cathode rays from a circular path without the use of concentric deflection electrodes. Ger. patent application O 26 267-21g dated Oct 21, 1943. Inventor: Weber, R. In German. 2.00
Diagram. Supplement to patent application O 26 229 VIIIc/21g.

3324-3331 PB L 83283 OPTA RADIO A.G., BERLIN. Electric filter. Ger. patent application O 25 996 dated Apr 22, 1943. Inventor: Rauft, K. In German. 2.00
Diagrams.

3332-3345 PB L 83283 OPTA RADIO A.G., BERLIN. Vacuum tube with high-voltage electrodes. Ger. patent application O 25 910 VIIIc/21g dated Mar 13, 1943. In German. 3.00
Drawing.

3346-3350 PB L 83283 Coil, especially for high frequency purposes. Ger. patent application O 46 050 VIIIc/21g dated Sep 26, 1942. In German. 2.00
Drawings.

3351-3356 PB L 83283 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for the production of anodes, especially graphite anodes, on metallic pins. Ger. patent application S 143 423-21g dated Apr 20, 1942. In German. 2.00
Drawing.

3357-3363 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK, G.M.B.H., NÜRNBERG. Compound ultrahigh frequency capacitor. Ger. patent application N 45 408 VIIIc/21g 10/01 dated Jan 4, 1943. In German. 2.00
Drawings.

3364-3376 PB L 83283 NOVAK, K. (Inventor). Vacuum tube with continuous control. Ger. patent application N 45 260 VIIIc/21g 12/03 dated Dec 8, 1941. In German. 3.00
Drawings. Supplement to patent application N 40 410.

3377-3381 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK G.M.B.H., NÜRNBERG. Vibrators with several pole pairs. Ger. patent application N 46 173 VIIIc/21g dated Nov 13, 1942. In German. 2.00
Drawing.

3382 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK G.M.B.H., NÜRNBERG. Oscillation rectifier. Ger. patent application N 46 172 VIIIc/21g dated Nov 13, 1942. In German. 2.00
Supplement to patent application 43 897 VIIIc/21g 15/01.

3383-3386 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK G.M.B.H., NÜRNBERG. Capacitor with folded electrodes. Ger. patent application N 46 231 dated Dec 4, 1942. In German. 2.00
Drawing.

3387-3389 PB L 83283 Contact arrangement for moving coil relays. Ger. patent application N 46 224 VIIIc/21g dated Dec 1, 1942. In German. 2.00
Drawing.

3390-3403 PB L 83283 NOVAK, K. (Inventor). Vacuum tube circuit for amplifiers. Ger. patent application N 44 723 VIIIc/21g 12/04 dated May 10, 1941. In German. 2.00
Diagrams. Supplement to patent application N 42 410.

3404-3405 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK G.M.B.H., NÜRNBERG. Electrolytic capacitor. Ger. patent application N 44 750 dated May 19, 1941. In German. 2.00

3406-3410 PB L 83283 Vacuum tube with grid control. Ger. patent application dated Sep 6, 1935. In German. 2.00
Diagram. Supplement to patent application N 36 121 VIIIa/21g.

3411-3416 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK G.M.B.H., NÜRNBERG. Relay arrangement. Ger. patent application N 54 303 VIIIc dated Dec 24, 1941. In German. 2.00
Drawing. Supplement to patent application N 44 953 VIII-21g.

3417-3420 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK G.M.B.H., NÜRNBERG. High sensitivity relay. Ger. patent application N 45 304 VIIIc/21g dated Dec 24, 1941. In German. 2.00
Drawing.

3421-3424 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK G.M.B.H., NÜRNBERG. Capacitive relay. Ger. patent application N 45 305 VIIIc/21g dated Dec 24, 1941. In German. 2.00
Drawing.

3425-3427 PB L 83283 NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK G.M.B.H., NÜRNBERG. Air tight container for electric circuit elements. Ger. patent application N 44 219 dated Oct 4, 1940. In German. 2.00

3428-3438 PB L 83283 NOVAK, K. (Inventor). Cathode ray tube voltmeter. Ger. patent application N 44 215 VIIIc/21g 13/60 dated Sep 27, 1940. In German. 2.00
Drawings.

3439-3445 PB L 83283 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Polyphase rectifier equipment with single-anode mercury-arc rectifier tanks. Ger. patent application S 137 641 VIIIc/21g 13/41 dated Feb 23, 1945. In German. 2.00
Diagrams.

3446-3448 PB L 83283 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for producing electric coils.

Ger. patent application S 136 989 VIIIc/21g dated May 5, 1939. In German. 2.00

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This FIAT microfilm reel consists of 150 German patent applications in the field of electric instruments, lighting equipment, etc. Individual items are listed below and will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $7.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
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1429-1436 PB L 84089	LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Zero current amplifier for measuring and regulation purposes. Ger. patent application L 137 891 21e dated May 14, 1942. In German. Supplement to patent application L 106 811 VIIId/21d2,42/03. Drawings.	2.00
1437-1441 PB L 84089	LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Method for measuring harmonic voltages of d-c motors, especially d-c generators. Ger. patent application L 109 616 VIIId/21e dated Nov 13, 1942. In German. Drawings.	2.00
1442-1447 PB L 84089	LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Method for measurement of distributed capacitance of coils, especially high-frequency filter coils. Ger. patent application L 110 113	

VIIId/21e dated Dec 29, 1942. In German. 2.00
Drawing.

1448-1450 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Input circuit of an amplifier tube connected to a vibrator. Ger. patent application L 111 381 VIIIa/21e dated Apr 4, 1943. In German. 2.00
Drawing.

1451-1455 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Oscillograph. Ger. patent application L 111 274 VIIIc/21e dated Apr 22, 1943. In German. 2.00
Drawings.

1456-1464 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Reversal of the input voltage in resistance, capacitance and inductance measuring bridge circuits. Ger. patent application L 111 202 dated Apr 4, 1943. In German. 2.00
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1465-1498 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for generation of pulses of arbitrary shape but always of definite duration. Ger. patent application L 110 290 dated Jan 1, 1943. Inventor: Jung-Zaeper. In German. 5.00
Drawings.

1499-1504 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Magnet system for moving coil devices. Ger. patent application L 108 886 VIIId/21e dated Apr 7, 1941. In German. 2.00
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1505-1509 PB L 84089 KRUPP (FRIED.) A.G., ESSEN. Composite magnetic shielding device. Ger. patent application K 157 932 dated Jun 7, 1940. In German. 2.00

1510-1517 PB L 84089 HARTMANN & BRAUN A.G., FRANKFURT-MAIN. Arrangement for measuring small a-c voltages. Ger. patent application H 166 593 dated Oct 27, 1941. In German. 2.00
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1518-1525 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Amplifier for oscillograph indicators. Ger. patent application L 109 145 dated Sep 30, 1942. In German. 2.00
Supplement to patent application L 107 601/21e. Drawing.

1526-1533 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for measuring the peaks of fluctuating voltages. Ger. patent application L 109 186 dated Sep 26, 1942. Inventor: Jung-Zaeper. In German. 2.00
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1534-1539 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for short-circuit tests on high-voltage devices, especially fuses, excess voltage arresters, etc. Ger. patent application L 100 308 VIII/21e dated Mar 6, 1940. In German. 2.00
Drawings.

1540-1542 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for rapid location of defects in electric networks. Ger. patent application L 100 193 VIIId/21e dated Feb 21, 1940. In German. 2.00
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1543-1555 PB L 84089 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT, BERLIN. Method for analyzing a mixed audio frequency composed of several frequencies. Ger. patent application L 98 412 VIIId/21e dated Mar 6, 1941. In German. 3.00
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1556-1563 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Circuit for rectification of a-c voltages by means of a duodiode, especially for application as voltmeter. Ger. patent application L 95 790 dated Oct 6, 1938. In German. 2.00
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1564-1566 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Auxiliary scale for electric measuring devices. Ger. patent application L 109 516 dated Nov 10, 1942. In German. 2.00
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1567-1568 PB L 84089 HAMBURGER SCHIFFBAU-VERSUCHS-ANSTALT G.M.B.H. Arrangement for simultaneous registration of two or more processes with a single oscillograph loop. Ger. patent application H 169 974 VIII/21e dated Nov 14, 1942. In German. 2.00

1569-1574 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Frequency meter. Ger. patent application L 107 229 VIIId/21e dated Mar 19, 1942. In German. 2.00
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1575-1581 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Phase shifter for electric measuring and telecommunications apparatus. Ger. patent application L 107 225 VIIId/21e dated Mar 23, 1942. Inventor: Weber. In German. 2.00

1582-1585 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Choke arrangement, especially for d-c amplifiers. Ger. patent application L 107 214 VIIId/21e dated Mar 18, 1942. In German. 2.00
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1586-1596 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Sweep oscillator arrangement for cathode-ray tubes. Ger. patent application L 107 213 VIIId/21e dated Mar 17, 1942. In German. 3.00
Diagrams.

1597-1612 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Method and arrangement for oscillographic registration, especially by means of cathode-ray oscillographs. Ger. patent application L 105 842 dated Oct 30, 1941. In German. 3.00
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1613-1616 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Combined current and voltage measuring arrangement for very high voltages. Ger. patent application L 105 785 dated Oct 31, 1941. In German. Diagram. 2.00

1617-1622 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Vibration galvanometer with a needle indicator. Ger. patent application L 104 779 VIIId/21e dated Jul 2, 1941. In German. Drawing. 2.00

1623-1633 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Phase-sensitive zero-current indicator for a-c bridge networks. Ger. patent application L 104 246 VIIId/21e dated May 2, 1941. In German. Diagrams. 3.00

1634-1638 PB L 84089 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT, BERLIN. Method for oscillographic registration of rapidly changing processes. Ger. patent application L 101 044 VIIId/21e dated Aug 4, 1942. In German. Drawing. 2.00

1639-1643 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for the reduction of phase difference in voltage transformers. Ger. patent application L 101 251 VIIId/21e dated Apr 26, 1941. In German. Drawing. 2.00

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1663-1671 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for the generation of saw-tooth sweep voltage for cathode-ray tubes. Ger. patent application L 101 988 dated Oct 1, 1940. Inventor: Wolff. In German. Diagram. 2.00

1672-1675 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for measuring the response time of electric indicators. Ger. patent application L 102 118 VIIId/21e dated Oct 17, 1940. In German. Drawing. 2.00

1676-1682 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Frequency meter. Ger. patent application L 102 150 VIIId/21e dated Oct 16, 1940. Inventor: Jung-Zaeper. In German. Diagram. 2.00

1683-1686 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Synchronization arrangement. Ger. patent application L 102 290 VIIId/21e dated Nov 5, 1940. In German. Supplement to patent application L 98 361 VIIId/21e. Diagram. 2.00

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1713-1716 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Piezo-electric measuring or control device with temperature compensation. Ger. patent application L 108 268 VIIId/21e dated Jun 24, 1942. In German. Supplement to patent application L 107 718 VIIId/21e. Drawings. 2.00

1717-1721 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for excess voltage measurement, especially in tests of shorting-contact switches. Ger. patent application L 107 399 VIIId/21e dated Apr 2, 1942. In German. Diagrams. 2.00

1722-1727 PB L 84089 KANDLR, L. (Inventor). Electrolytic ammeter with continuous registration. Ger. patent application K 166 768 dated Dec 7, 1942. In German. Drawing. 2.00

1728-1730 PB L 84089 KETTERER, O. (Inventor). Mechanical arrangement for ammeters. Ger. patent application K 162 763 VIIId/21e dated Nov 14, 1941. In German. Drawing. 2.00

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plifier for measuring and control purposes. Ger. patent application L 106 170 VIIId/21e dated Dec 9, 1941. In German. 2.00
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1748-1756 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Circuit for the generation of symmetrical voltage for single deflection of cathode-ray tube beams. Ger. patent application L 101 407 dated Aug 1, 1940. In German. 2.00
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1757-1761 PB L 84089 ZIMMERMANN, E. (Inventor). Arrangement for voltage determination of the secondary transformer winding by voltage measurement on the primary winding and vice versa. Ger. patent application Z 25 147 dated Mar 15, 1939. In German. 2.00
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1762-1765 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Method for testing the break-down voltage of coils for electric apparatus. Ger. patent application L 102 608 VIIId/21c dated Dec 3, 1940. In German. 2.00
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1766-1773 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Miniature electric measuring instruments, especially for aircraft. Ger. patent application L 101 517 VIIId/21e dated Aug 7, 1940. In German. 2.00
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1774-1779 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for measuring small phase differences, especially of grid-controlled gas or vapor tubes. Ger. patent application L 108 434 VIIId/21e dated Jul 15, 1942. In German. 2.00
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1832-1841 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for recording disturbances in electric power stations. Ger. patent application L 107 601 VIIId/21e dated Apr 11, 1942. In German. 2.00

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Drawing.

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Drawings.

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Drawings.

2250-2253 PB L 84089 LICENTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Firing arrangement for electric discharge tubes. Ger. patent application L 105 240 VIIIc/21f dated Aug 28, 1941. In German. 2.00
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The patents are principally for various types of foam generators and their safety devices for revolving ladders, foam catching devices for combustible liquids, and devices for hose storage. Drawings are attached.

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This reel was prepared by PIAT investigators in Germany. 112 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $7.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
6722-6724 PB L 83231	Photographic reversion. Ger. patent application F 96 079 IVa/57b dated Jan 22, 1945. In German. Supplement to patent application F 94 915 IVa/57b.	$2.00
6725-6728 PB L 83231	FELDMÜHLE, PAPIER- UND ZELLSTOFF-WERKE, A.G., BERLIN. Sensitizers for plastics. Ger. patent application F 93 977 dated Jun 11, 1943. In German.	2.00
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6732-6733 PB L 83231	FRANZKE, E. (Inventor). Equipment and production process for diapositives giving the impression of reliefs, especially for advertising diapositives and silhouette pictures. Ger. patent application F 94 664 IVa/57b dated Dec 11, 1943. In German.	2.00
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